

# SONY®

## Network Remote Controller

Operating Instructions

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Network connections

Enjoying music content  
on your home network

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specifications

<http://www.sony.net/>



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RMN-U1

## WARNING

**To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.**

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc.

Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

The nameplate is located on the bottom exterior of the remote control charger (BCA-U1).

## For customers in the United States and Canada

### RECYCLING LITHIUM-ION BATTERIES



Lithium-Ion batteries are recyclable. You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.

For more information regarding recycling of rechargeable batteries, call toll free

1-800-822-8837, or visit <http://www.rbrc.org/>

**Caution:** Do not handle damaged or leaking Lithium-Ion batteries.

## For customers in the United States

### Owner's Record

The model and serial numbers are located on the rear of the unit.

Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

### Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**The following FCC statement applies only to the version of this model manufactured for sale in the U.S.A. Other versions may not comply with FCC technical regulations.**

**NOTE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION**

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices.

There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. [Network Remote Controller (RMN-U1)] has been tested and found to comply with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65.

**For customers in Canada**

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices.

There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. [Network Remote Controller (RMN-U1)] has been tested and found to comply with IC radiation exposure limits set

forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules.

**For customers in Europe**

**Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives.**

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku, Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany.

For any service or guarantee matters, please refer to the addresses given in separate service or guarantee documents.

Hereby, Sony Corp., declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For details, please access the following URL:  
<http://www.compliance.sony.de/>



This product is intended to be used in the following countries.

AT, BE, CH, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IT, NL, NO, PL, PT, RO, SE, SK

**For customers who use this product in the following countries:**

**Norway:**

Use of this radio equipment is not allowed in the geographical area within a radius of 20 km from the centre of Ny-Alesund, Svalbard.

**France:**

The WLAN feature of this Network Remote Controller shall exclusively be used inside buildings.

Any use of the WLAN feature of this Network Remote Controller outside of the buildings is prohibited on the French territory. Please make sure that the WLAN feature of this Network Remote Controller is

disabled before any use outside of the buildings. (ART Decision 2002-1009 as amended by ART Decision 03-908, relating to radio-frequencies use restrictions.)

### Italy:

Use of the RLAN network is governed:

- with respect to private use, by the Legislative Decree of 1.8.2003, no. 259 ("Code of Electronic Communications"). In particular Article 104 indicates when the prior obtainment of a general authorization is required and Art. 105 indicates when free use is permitted;
- with respect to the supply to the public of the RLAN access to telecom networks and services, by the Ministerial Decree 28.5.2003, as amended, and Art. 25 (general authorization for electronic communications networks and services) of the Code of electronic communications.



### **Disposal of Old Electrical & Electronic Equipment (Applicable in the European**

### **Union and other European countries with separate collection systems)**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.



### **Disposal of waste batteries (applicable in the European**

### **Union and other European countries with separate collection systems)**

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead.

By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only.

To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

For all other batteries, please view the section on how to remove the battery from the product safely.

Hand the battery over to the applicable collection point for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

# Before operating this unit

## About copyright protection

Music data cannot be used without the permission of the copyright holder except when used solely for personal enjoyment.

## About the illustrations used in this manual

Illustrations and screens used in this manual may vary from the actual screens.

Malfunctions that occur during the normal use of the unit will be repaired by Sony in accordance with the conditions defined in the limited warranty for this unit. However, Sony will not be liable for any consequences arising from a failure to play caused by a damaged or malfunctioning unit.

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# Features of this unit

RMN-U1 has a DLNA (Digital Living Network Alliance) controller function and an infrared remote control function.

When you press the HOME button on the unit, DLNA devices that can be designated as a renderer (network controlled player), or infrared devices that you have registered with this unit are displayed. You can display the appropriate remote control easily by tapping the desired device icon or Activity icon.



The DLNA controller screen



The infrared remote control screen



### **You can use this unit as a DLNA-compliant controller.**

- You can manage DLNA-compliant devices that are connected to your home network. For example, you can play back audio content stored on the computer in the bed room, using this unit in the children's room (page 35).
- You can enjoy audio content currently being played back on devices with the PARTY STREAMING function on your home network at the same time (page 39).

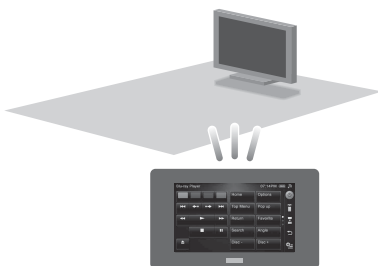


- You can also manage video and photo content on your home network using this unit.
- This unit registers servers and renderers (network controlled player) on your home network automatically, simply by starting up this unit after connecting DLNA-compliant devices to your network.

You can use this unit as a DLNA controller without a registration process.

### **You can use this unit for centralised control of AV components.**

- This unit is preset for the products most major vendors as well as for Sony devices (page 49). If you cannot find the vendor name, the unit allows you to program the desired remote code by using the learning function (page 51).

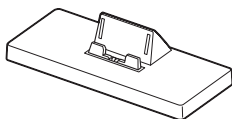


### **You can register a favorite Activity on the HOME screen of the “♡ Activity” tab.**

The Activity function allows you to prepare devices and content, etc., to suit to your purpose by just tapping the Activity icon (page 53).

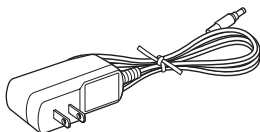
# Checking the supplied accessories

## ❑ Remote control charger (1)

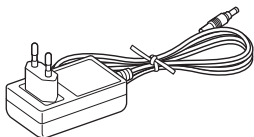


## ❑ AC power adaptor (1)

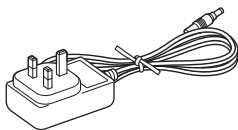
Models for the USA and Canada



Models for Europe (except model for the UK)



Model for the UK



## ❑ Operating Instructions (1)

This manual provides full explanations of the various settings, operations, and network connection procedures.

This manual also contains precautions for the safe use of the unit.

## ❑ Quick Setup Guide (1)

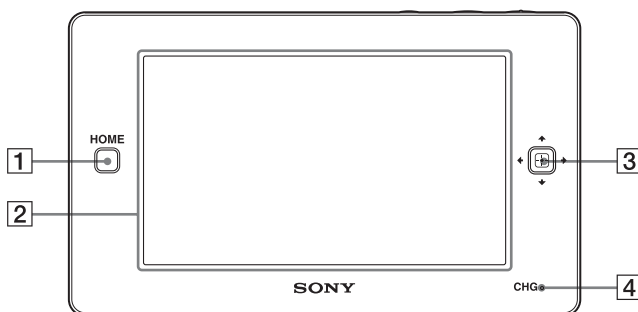
This manual explains how to set up network connections and use the functions that can be used in conjunction with that network connections.

# Guide to parts and controls

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## Main unit

### Front



**1 HOME button**

Press to display the HOME screen (page 14).

**2 LCD screen**

Displays the touch panel screen for menu items or the remote control. The remote screen display depends on the status of the unit.

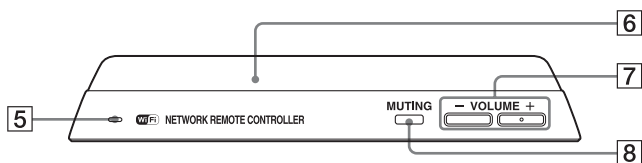
**3 Direction key/ (Enter) key**

Use this key to select an item when you use this unit as an infrared remote control. The key can be used when it lights up.

**4 CHG (charging) indicator**

Lights up in red while the unit is being charged on the remote control charger. The indicator turns off when charging has completed (page 18).

## Top



### 5 Speaker

The operation sound is output.

### 6 Remote transmitter

Sends infrared signals to other devices.

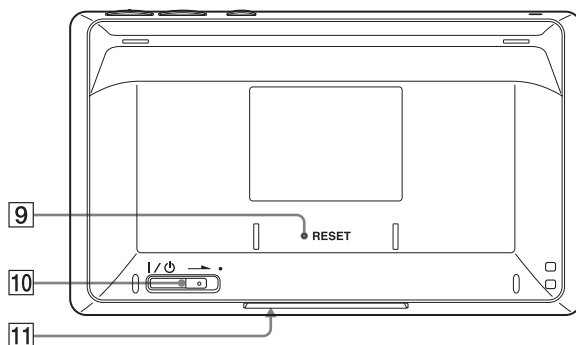
### 7 VOLUME +/- button

Press to adjust the volume level of the operating device (page 41).

### 8 MUTING button

Press to turn off the sound of the operating device temporarily. Press the button again to restore the sound (page 41).

## Rear



### 9 RESET button

Refer to “How to reset the unit” (page 72).

### 10 I/⏻ (power) switch

Slide the switch to turn the power on or off (page 18).

### 11 Remote sensor

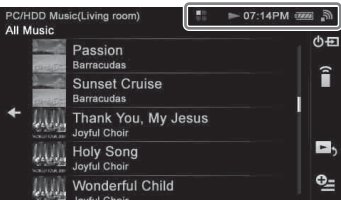
Receives infrared signals from a remote control when you use the learning function (page 51).

# Display window

This section introduces display windows that are used frequently.

## Header items

The following items are always displayed together on an operation screen.

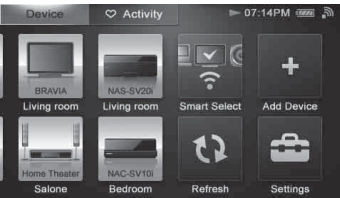


Item	Description
	This antenna icon indicates the strength of the wireless LAN signal. More segments indicate a stronger signal.  ■ → ● → ● → ● → ● ✕ appears when this unit is not connected to your wireless LAN router/access point.
	Battery indicator shows the approximate remaining battery power. ■ (the battery is fully charged) → ... → ■ (the battery is drained) When the battery is drained, "There is no battery power left. The power will be turned off." appears on the screen.
Current Time	Displays the current time.
	Displays the playback operation status.

Item	Description
	Displayed during internal processing.
	Displayed while infrared signals are being sent.

## HOME screen (Device)

Appears when you tap the "Device" tab after pressing the HOME button.  
Tap a desired device or menu to select that item.




Item	Description
Device icon/device name/group name	Tap to select the desired device.
Smart Select	Tap to select a device that is located in front of this unit.
+ Add Device	Tap to add an infrared device.
Refresh	Tap to update the HOME screen information.
Settings	Tap to make or change settings.

## HOME screen (Activity)

Appears when you tap the "Activity" tab after pressing the HOME button.  
Tap a desired Activity or menu to select that item.



Item	Description
	Start PARTY Tap to start a new PARTY.
	PARTY List Tap to control the PARTY currently being held.
	Current Activ. Tap to return to the screen of the Activity currently selected.

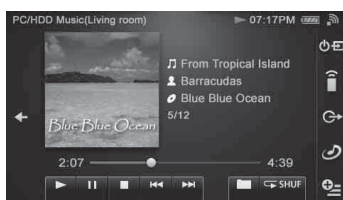
Item	Description
Activity icon/ Activity name/ group name	Tap to select the desired Activity.
<b>+</b> Add Activity	Tap to add an Activity.
 Settings	Tap to make or change settings.





## DLNA controller screen






Appears when you are able to control a DLNA-compliant device on your home network.

## Music

The playback screen for PC/HDD Music is used here in illustrations.



Item	Description
Jacket information	Displays the jacket of the audio content that is currently being played back.
Content information	Displays information on the audio content that is currently being played back.
Current playback time of content	Displays the playback time of content currently played back. You can move the playback position by using the cursor shown on the progress bar.
Total playback time of content currently being played back	Displays the total playback time of content currently being played back.
Operation buttons	Tap to operate the device currently controlled.
 *	Tap to select the playback range.
 SHUF*	Tap to select the playback mode.
	Tap to display the I/O and input panel.
	Tap to display the registered device list.

Item	Description
	Tap to display the screen used for switching the renderer (network controlled player). <b>(Tips)</b> <ul style="list-style-type: none"> <li>This icon does not appear in the following cases. <ul style="list-style-type: none"> <li>During a PARTY</li> <li>While playing back content that cannot be delivered again by the server</li> </ul> </li> <li> appears during a PARTY.</li> </ul>
	Tap to start a new PARTY, or control the PARTY currently being held.
	Tap to display the option menu.
	Tap to return to the content list. <b>(Tip)</b> The server list may appear depending on the status of the unit.






\* The icon displayed is different depending on the settings.

## Video

The playback screen for PC/HDD Video is used here in illustrations.

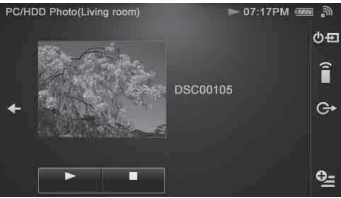




Item	Description
Thumbnail	Displays the thumbnail of the video content that is currently being played back.
Content information	Displays information on the video content that is currently being played back.
Current playback time of the content	Displays the playback time of the video content currently being played back. You can move the playback position by using the cursor shown on the progress bar.




Item	Description
Total playback time of the content currently being played back	Displays the total playback time of the video content currently being played back.
Operation buttons	Tap to operate the device currently controlled.
	Tap to display the I/⏻ and input panel.
	Tap to display the registered device list.
	Tap to display the screen used for switching the renderer (network controlled player).
	Tap to display the option menu.
	Tap to return to the content list. <b>(Tip)</b> The server list may appear depending on the status of the unit.

## Photos

The playback screen for PC/HDD Photo is used here in illustrations.







Item	Description
Photo image	Displays the image of the photo that is currently being displayed.
Content information	Displays information on the photo that is currently being displayed.
Operation buttons	Tap to operate the device currently controlled. Tap ► to display photos. Tap ■ to cancel the display.
	Tap to display the I/⏻ and input panel.
	Tap to display the registered device list.



Item	Description
	Tap to display the screen used for switching the renderer (network controlled player).
	Tap to display the option menu.
	Tap to return to the content list. <b>(Tip)</b> The server list may appear depending on the status of the unit.

## Infrared remote control screen

Appears when you are able to control an infrared device. There are two types remote control screen, one for device control and one for Activity control. The screen of the play key page is used here in illustrations.



Item	Description
	Tap to turn the device which is currently being operated on or off. <b>(Tip)</b> This icon appears when the device control screen is displayed.
	Tap to display the I/⏻ and input panel. <b>(Tip)</b> This icon appears when the Activity control screen is displayed.
	Tap to display the registered device list.
	Tap to display the next page. <b>(Tip)</b> The remote control screen is switched following one of three patterns each time you tap this icon. <ul style="list-style-type: none"> <li>• Play key page</li> <li>• 10 key page</li> <li>• Input page</li> </ul>

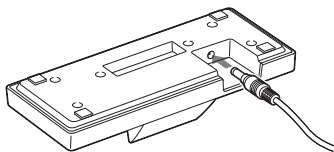
Item	Description
	Tap to return to the previous screen.
	Tap to display the option menu.

# Basic operations

## Charging the unit

This unit is not fully charged when you first unpack it after purchase. Make sure to fully charge the unit before using it.

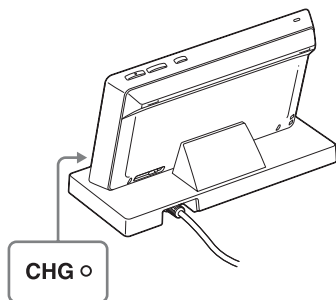
- 1 Connect one end of the AC power adaptor to the DC IN jack of the remote control charger and the other end to a wall outlet.



- 2 Place the unit on the remote control charger.

When you place the unit on the remote control charger, the CHG indicator lights up in red and charging starts.

The CHG indicator turns off when the unit is fully charged.

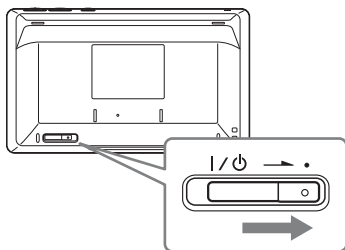


## Turning this unit on/off

Slide the I/⏻ (power) switch in the direction of the arrow.

The last screen which was used when you used this unit the last time appears.

The screen goes off automatically if you do not operate this unit for a while (standby mode). In this case, press any button on the unit or tap the screen to turn the screen on again.



### Note

This unit is turned off automatically if you do not operate this unit for certain period of time (standby mode). In this case, tap the screen, press any button on the unit, or slide the I/⏻ switch in the direction of the arrow to turn it back on. It takes a while to reboot.

## To enter the standby mode

Set the unit to the standby mode when you are not using it.

The standby mode makes the time shorter that required for fully charging the unit on the remote control charger than that required when the unit is turned off.

Slide the I/⏻ switch in the direction of the arrow when the unit is turned on.

To boot up the unit, tap the display window or press any button.

### Tip

The standby mode works as a low power consumption mode.

## To turn the unit off

Set the unit to off if you do not want the unit to be turned on easily by tapping the display screen or touching any button.

Slide the I/⏻ switch in the direction of the arrow and hold it there until the display window goes off.

To turn the unit on, slide the I/⏻ switch in the direction of the arrow again.

## To set the screen off timer

- 1 Press HOME on the unit.
- 2 Tap “⚙ Settings.”
- 3 Tap “Common Settings.”
- 4 Tap “Screen Off Timer.”
- 5 Tap the desired turn-off time.
- 6 Tap “Next ➡.”  
The screen used for selecting whether or not to activate the screen off timer when you place the unit on the remote control charger appears.
- 7 Tap the check box to select the desired setting.
- 8 Tap “OK.”

## Entering text

Entering text may be required during some setup operations such as network settings. You can enter text using the soft keyboard screen.

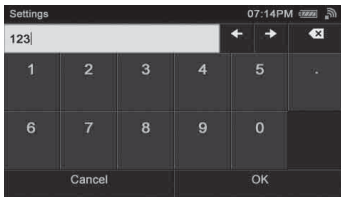
## Full text input screen



Key	Description
← →	Tap to move the cursor.
✕	Tap to delete the character just entered.
@!?	Displays the symbol input screen.
Caps	Tap to switch the screen between the all caps and small letters screen.
âäå	Displays special characters for European languages.
Space	Tap to create a blank space.

- 1 Tap the desired letter or number.
- 2 Tap “OK” when you have entered all letters or numbers.

## Screen for inputting numbers/IP address



- 1** Tap the desired number.
- 2** Tap “OK” when you have entered all numbers.

### To cancel the input

Tap “Cancel” in step 2.

# Performing initial setup operations

When the unit is turned on for the first time after you purchase it, some basic set-up operations are required, for example, initial settings and network settings.

Entering characters will be needed during the setup operations. For details on entering characters, see “Entering text” (page 19).

**1** Turn the DLNA (Digital Living Network Alliance)-compliant devices in your home on.

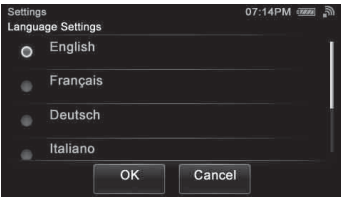
**2** Slide the I/⏻ switch in the direction of the arrow if the unit is turned off.

The language selection screen appears.

**3** Tap the language you want to select, then tap “OK.”

You can select from the following languages.

Display	Language
English	English
Français	French
Deutsch	German
Italiano	Italian
Español	Spanish



The screen is displayed in the selected language.

**4** Connect the unit to your home network.

Set up the network after checking your network environment. Refer to the following explanation.

- If you use the access point scan method, perform step 4 in “Searching for an access point and setting up a wireless network (access point scan method)” (page 24).
- If you use the WPS push button configuration method, perform step 4 in “Setting up a wireless network using the WPS push button configuration method” (page 26).
- If you use the PIN method, perform step 4 in “Setting up a wireless network using the PIN code method” (page 27).

“Connection is complete.” appears when you have completed the network connection.

**5** Tap “Close.”

A confirmation screen appears.

**6** Tap “Close.”

The unit starts registering the DLNA-compliant devices that can be recognized over the network, automatically. This may take a while.

**Tips**

- You can register up to 20 servers and up to 30 renderers (network controlled players) on this unit.
- Tap “↻ Refresh” to refresh the HOME screen if the desired device is not registered automatically.

## To cancel initial settings

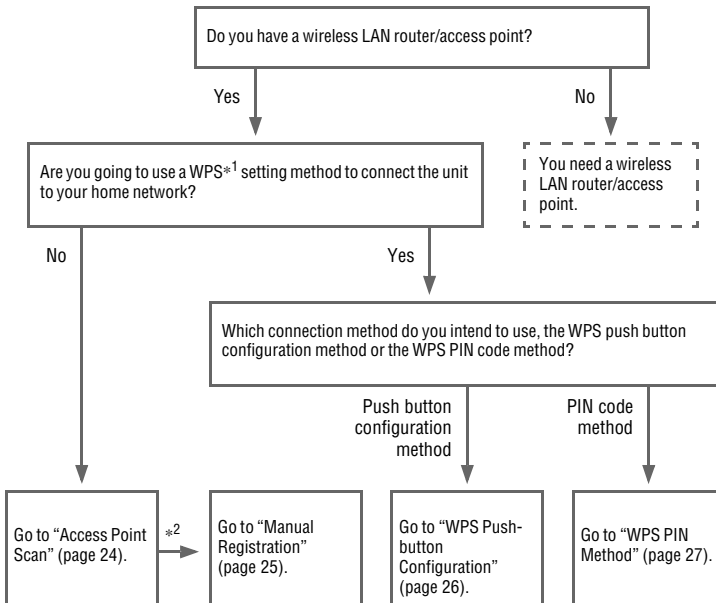
- 1** Tap "Cancel."  
"Setup will be canceled. Network related functions may not be available." appears on the screen.
- 2** Tap "OK."  
"Setup has been canceled. Do you perform the setup next time you start up this unit?" appears on the screen.
- 3** Tap "Yes" or "No."  
The HOME screen appears.

# Connecting the unit to your home network (network settings)

This section explains how to connect the unit to your home network.

Check your connection method using the chart below.

For details on which connection method your wireless LAN router/access point supports, refer to the operating manual of your wireless LAN router/access point.



\*1 WPS (Wi-Fi Protected Setup) is a standard created by the Wi-Fi Alliance allowing you to setup a wireless network easily and securely.

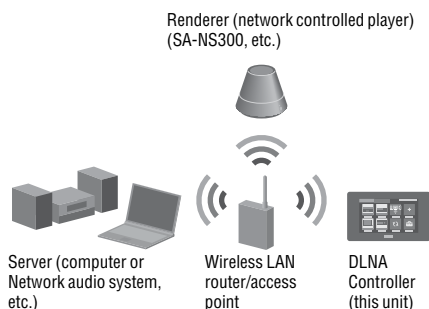
\*2 You can use the manual setup method when you cannot find the desired access point using the access point scan method.

## What the unit can do when connected to a network

This unit can control DLNA-compliant devices on your home network as a DLNA controller.

# Checking the wireless LAN environment of your home network

## Read the following first



You must have the following environment to enjoy content on your home network. Confirm your environment in advance.

- ☐ **A wireless LAN home network environment must be available. (Make sure that a wireless router is used.)**
- ☐ **A device that can be used as a server (a computer, etc.) must be connected to your wireless LAN home network.\***
- ☐ **A device that can be used as a renderer (network controlled player) must be connected to your wireless LAN home network.**

\* For details on servers which are compatible with this unit, see page 32.

There are several connection methods you can use to set up a wireless network: searching for an access point, using a WPS connecting method (either the push button configuration method or the PIN code method), or manual setting.

Select the connection method that can be used for your home network using the chart on page 23.

### Notes

- Make sure not to use the wireless LAN function in a place where medical equipment (such as a pacemaker) is used or the use of wireless communication is prohibited.
- Before connecting to your home network, you need to prepare a wireless LAN router/access point. For details, refer to the operating manual of the device.
- Depending on your home network environment, the wireless LAN router/access point may have been set up

such that it cannot be connected using WPS, even though it is compatible with WPS. For details on whether your wireless LAN router/access point is compatible or not compatible with WPS, and on the setup of a WPS connection, refer to the operating manual of your wireless LAN router/access point.

- You may encounter setup difficulties if the unit and the wireless LAN router/access point are located too far from each other. If you do, move the devices closer to each other.

## Searching for an access point and setting up a wireless network (access point scan method)

You can set up a wireless network by searching for the access point. Confirm you have the following information in advance, as you will need it to set up the network with this connection method.

- ☐ **The network name (SSID\*<sup>1</sup>) that identifies your network.\*<sup>2</sup> (This will be needed in step 5.)**  
\_\_\_\_\_
- ☐ **If your wireless home network is secured by encryption, the security key (WEP key, WPA/WPA2 key) for your network.\*<sup>2</sup> (This will be needed in step 7.)**  
\_\_\_\_\_

\*<sup>1</sup> SSID (Service Set Identifier) is a name that identifies a particular access point.

\*<sup>2</sup> This information should be available from a label on your wireless LAN router/access point, from the operating manual, from the person who set up your wireless network, or from the information provided by your Internet service provider.

## 1 Press HOME on the unit.

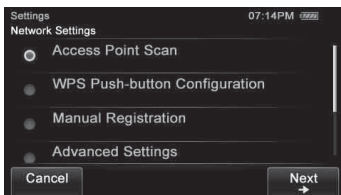
The HOME screen appears.

## 2 Tap “Settings.”

The settings menu appears.

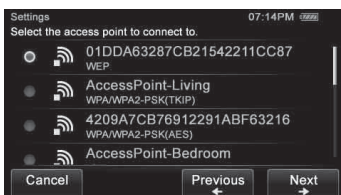
- 3 Tap "Network Settings."  
The connection type screen appears.

- 4 Tap "Access Point Scan," then tap "Next ➔."



The unit automatically starts searching for access points and displays a list of all available access points. The unit can display a maximum of 20 access points in the list.

- 5 Tap the desired access point from the list.



If the desired access point does not appear on the screen, tap "Previous ◀" to return to step 4, then perform step 4 again.

If an access point cannot be detected and "Access point not found." appears on the screen, tap "Close" so that the unit proceeds to step 4 of the connection type display, then perform step 4 again.

If the access point still does not appear or still cannot be detected, you can input the access point manually.

See "If you cannot find the desired access point (manual setup method)" (page 25).

- 6 Tap "Next ➔."

The security key input screen appears.  
If the security key input screen does not appear, proceed to step 8.

- 7 Tap the text box and enter the security key (WEP Key, WPA/WPA2 Key) for your network, then tap "Next ➔."

A confirmation screen appears.

For details on how to input characters, see "Entering text" (page 19).

The security key appears as "\*\*\*\*\*."

- 8 Tap "OK."

"Connection is complete." appears.

Refer to "Network connection" (page 72), if you were unable to make the desired network connections.

- 9 Make the server settings.

To enjoy content stored on the server over the network that has been set up in this section, you need to set up your server first (page 32).

### If you cannot find the desired access point (manual setup method)

If the desired access point does not appear in the list of available access points, you can enter the access point manually.

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap "⚙ Settings."  
The settings menu appears.
- 3 Tap "Network Settings."  
The connection type screen appears.
- 4 Tap "Manual Registration," then tap "Next ➔."
- 5 Tap "SSID Input," then tap "Next ➔."
- 6 Tap the text box and enter the network name (SSID), then tap "Next ➔."

For details on how to input characters, see "Entering text" (page 19).

- 7** Tap the security setting.  
You can select from  
“WPA/WPA2-PSK(AES),”  
“WPA/WPA2-PSK(TKIP),” “WEP,” or  
“None.”
- Note**  
If you select “None,” the unit skips step 9 and goes to step 10.
- 8** Tap “Next ➔.”
- 9** Tap the text box and enter your security key, then tap “Next ➔.”  
A confirmation screen appears.  
For details on how to input characters, see “Entering text” (page 19).  
The security key appears as “\*\*\*\*\*.”
- 10** Tap “OK.”  
“Connection is complete.” appears.  
Refer to “Network connection” (page 72), if you were unable to make the desired network connections.
- 11** Make the server settings.  
To enjoy content stored on the server over the network that has been set up in this section, you need to set up your server first (page 32).

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## Setting up a wireless network using an access point compliant with WPS

You can easily set up a wireless network using an access point compliant with WPS. WPS setting can be made either by the push-button configuration method or the PIN (Personal Identification Number) code method.

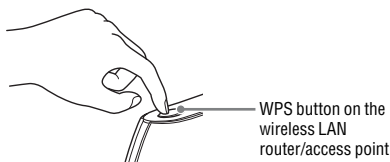
### What is WPS (Wi-Fi Protected Setup)?

WPS is a standard created by the Wi-Fi Alliance allowing you to setup a wireless network easily and securely.

## Setting up a wireless network using the WPS push button configuration method

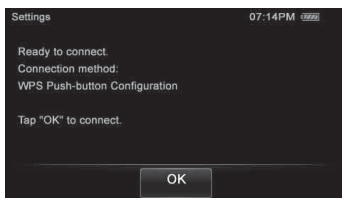
You can easily set up a WPS wireless connection with one push of the designated button.

- 1** Press HOME on the unit.  
The HOME screen appears.
- 2** Tap “⚙ Settings.”  
The settings menu appears.
- 3** Tap “Network Settings.”  
The connection type screen appears.
- 4** Tap “WPS Push-button Configuration,” then tap “Next ➔.”
- 5** Check the location of the WPS button of the router/access point and the instructions on how and when to use the WPS button, then tap “Next ➔.”
- 6** When the message that tells you to press the WPS button on the access point appears, press the WPS button on the wireless LAN router/access point for a few seconds, within two minutes.



A confirmation screen appears.  
It may take a while for the unit to complete the network settings.

## 7 Tap "OK."



"Connection is complete." appears.

Refer to "Network connection" (page 72), if you were unable to make the desired network connections.

## 8 Make the server settings.

To enjoy content stored on the server over the network that has been set up in this section, you need to set up your server first (page 32).

### Setting up a wireless network using the PIN code method

If the access point supports the WPS PIN (Personal Identification Number) code connection, you can set up a WPS wireless connection by entering the unit's PIN code into the wireless LAN router/access point.

### 1 Press HOME on the unit.

The HOME screen appears.

### 2 Tap "Settings."

The settings menu appears.

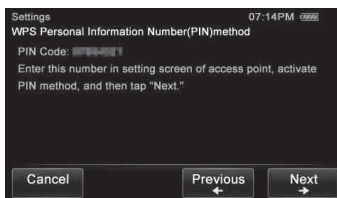
### 3 Tap "Network Settings."

The connection type screen appears.

### 4 Tap "Manual Registration," then tap "Next ➡."

### 5 Tap "WPS PIN Method," then tap "Next ➡."

The unit's PIN code (8 digits) is displayed. Keep the PIN code display on the screen until you finish entering the PIN code in the wireless LAN router/access point. (A different PIN code will be displayed each time you perform this operation.)



## 6 Input the unit's PIN code into the wireless LAN router/access point.

For details on entering the PIN code, refer to the operating manual of the wireless LAN router/access point.

## 7 Tap "Next ➡."

A confirmation screen appears.

It may take a while for the unit to complete the network settings.

## 8 Tap "OK."

"Connection is complete." appears.

Refer to "Network connection" (page 72), if you were unable to make the desired network connections.

## 9 Make the server settings.

To enjoy content stored on the server over the network that has been set up in this section, you need to set up your server first (page 32).

---


## Setting up the IP address/ proxy server

You may have to use a fixed IP address and proxy server, depending on your home network settings, or the specifications of the Internet service provider.

For details on the input values in the following procedures, refer to the operating manual of the respective device or the information provided by the person who set up your wireless network or your Internet service provider.

### To use a fixed IP address

The unit is set to obtain the IP address automatically as the factory setting, however, you can use a fixed IP address, depending on your network settings.

- 1** Press HOME on the unit.  
The HOME screen appears.
- 2** Tap “ Settings.”  
The settings menu appears.
- 3** Tap “Network Settings.”  
The connection type screen appears.
- 4** Tap “Advanced Settings,” then tap “Next ➡.”
- 5** Tap “DHCP Setting,” then tap “Next ➡.”
- 6** Tap “Manual,” then tap “Next ➡.”
- 7** Enter the values for “IP Address,” “Subnet Mask” and “Default Gateway.”  
For details on how to input characters, see “Entering text” (page 19).
- 8** Tap “Next ➡.”
- 9** Enter the values for the “Primary DNS” and “Secondary DNS” settings.  
For details on how to input characters, see “Entering text” (page 19).
- 10** Tap “Next ➡.”  
A confirmation screen appears.

- 11** Tap “OK.”  
“Connection is complete.” appears.  
Refer to “Network connection” (page 72), if you were unable to make the desired network connections.


- 12** Make the server settings.  
To enjoy content stored on the server over the network that has been set up in this section, you need to set up your server first (page 32).

#### Tip

If you want to obtain the IP address automatically using DHCP, select “Auto” for the IP address settings in step 6. If you select “Auto” in step 6, the DNS settings selection screen appears. In this case, select “Auto” or “Manual” for DNS settings and enter the respective values following the instructions that appear on the display.

### To use a proxy server

If you need to use a proxy server (for example, when you are instructed to use a proxy server by your Internet service provider), be sure to prepare the proxy address and the port number in advance.

- 1** Press HOME on the unit.  
The HOME screen appears.
- 2** Tap “ Settings.”  
The settings menu appears.
- 3** Tap “Network Settings.”  
The connection type screen appears.
- 4** Tap “Advanced Settings,” then tap “Next ➡.”
- 5** Tap “Proxy Setting,” then tap “Next ➡.”
- 6** Tap “Use,” then tap “Next ➡.”
- 7** Enter the values for “Address:” and “Port:”  
For details on how to input characters, see “Entering text” (page 19).
- 8** Tap “Next ➡.”  
A confirmation screen appears.
- 9** Tap “OK.”  
“Connection is complete.” appears.  
Refer to “Network connection” (page 72), if you were unable to make the desired network connections.

## 10 Make the server settings.

To enjoy content stored on the server over the network that has been set up in this section, you need to set up your server first (page 32).

---

## Confirming the network settings

You can confirm the network status and settings.

---

### 1 Press HOME on the unit.

The HOME screen appears.

---

### 2 Tap “ Settings.”

The settings menu appears.

---

### 3 Tap “Network Settings.”

The connection type screen appears.

---

### 4 Tap “Connection Diagnosis,” then tap “Next ➔.”

The result of the connection diagnosis appears.

---

### 5 Tap the item you want to check.

You can select from following items.  
Wireless LAN Connection/IP Address/DNS/  
Proxy Server

---


### 6 Tap “Close.”

# Setting the clock

The clock can be set either automatically by connecting the unit to the Internet, or manually.

## Setting the clock via an Internet connection

You can set the clock by connecting the unit to the NTP (Network Time Protocol) server on the Internet. Before using this function, make sure the network settings have already been made properly.

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap “Settings.”
- 3 Tap “Common Settings.”
- 4 Tap “Clock Settings.”
- 5 Tap “Date&Time Settings.”
- 6 Tap “NTP Settings,” then tap “Next ➔.”  
If you want to set the clock manually, see “To set the clock manually” (page 31).
- 7 Tap the text box that is below “NTP Server Name:.”

## 8 Enter the name or IP address of the NTP Server.

For details on entering text during the setup, see “Entering text” (page 19).



### Tip

The unit connects to the default server when you tap “OK” without changing the server name.

## 9 Tap the text box that is below “Time Zone:.”

## 10 Tap the desired time zone.

### Tip

If the desired city does not appear in the “Time Zone:,” select a city that is within the same time zone as the desired city.

## 11 Tap “OK.”


Refer to “To set the clock manually” (page 31), if you failed the clock settings.

## A list of available time zones


The following items appear in step 10. Select the city where the unit is being used.

- GMT+13 Nukualofa
- GMT+12 Auckland
- GMT+11 Noumea
- GMT+10 Sydney, Port Moresby

GMT+9:30 Adelaide  
 GMT+9 Tokyo, Seoul  
 GMT+8 Beijing, Singapore  
 GMT+7 Bangkok, Jakarta  
 GMT+6:30 Yangon  
 GMT+6 Dhaka  
 GMT+5:45 Kathmandu  
 GMT+5:30 New Delhi  
 GMT+5 Karachi, Islamabad  
 GMT+4:30 Kabul  
 GMT+4 Abu Dhabi, Tbilisi  
 GMT+3:30 Teheran  
 GMT+3 Moscow, Riyadh  
 GMT+2 Athens, Helsinki  
 GMT+1 Paris, Berlin  
 GMT+0 London, Lisbon  
 GMT-1 Azores  
 GMT-2  
 GMT-3 Sao Paulo, Buenos Aires  
 GMT-3:30 St. John's  
 GMT-4 Halifax, Santiago  
 GMT-5 New York, Toronto  
 GMT-6 Chicago, Mexico City  
 GMT-7 Denver, Calgary  
 GMT-8 Los Angeles, Vancouver  
 GMT-9 Anchorage  
 GMT-10 Honolulu, Papeete  
 GMT-11 Pago Pago  
 GMT-12

- 2** Tap “Settings.”
- 3** Tap “Common Settings.”
- 4** Tap “Clock Settings.”
- 5** Tap “Daylight Saving.”
- 6** Tap “Daylight Saving.”
- 7** Tap “OK.”

## To set the clock manually

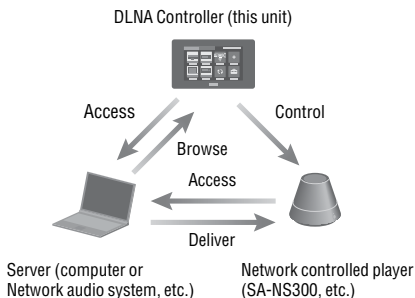
- 1** Press HOME on the unit.  
The HOME screen appears.
- 2** Tap “Settings.”
- 3** Tap “Common Settings.”
- 4** Tap “Clock Settings.”
- 5** Tap “Date&Time Settings.”
- 6** Tap “Date&Time Manual Settings,”  
then tap “Next ➔.”
- 7** Enter the year, month, day, hour,  
and minute.
- 8** Tap “OK.”

## To set the daylight saving time setting

- 1** Press HOME on the unit.  
The HOME screen appears.

# Playing music content on your server

You can enjoy audio content from anywhere by controlling the DLNA-compliant devices on your home network.



This section explains how to set up Windows Media Player when using it as a server. For details on the settings of other server devices, refer to the operating manuals or help of the respective devices or applications.

## Note

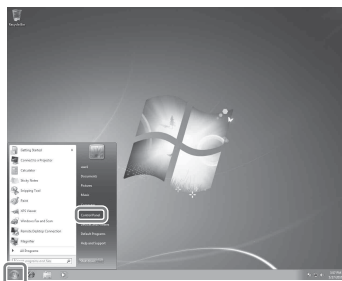
The items displayed on the computer may be different from the ones shown in this section, depending on the version of the operating system or the computer environment. For details, refer to the help of your operating system.

## ■ When using a computer equipped with Windows 7

This section explains how to set up a manufacturer-installed version of Windows Media Player 12 for Windows 7 as a server to use with this unit.

For details on how to operate Windows Media Player 12, refer to the help of Windows Media Player 12.

**1** Go to [Start] - [Control Panel].



**2** Select [View network status and tasks] under [Network and Internet]. The [Network and Sharing Center] window appears.

## Tip

If the desired item does not appear in the computer display, try to change the display type used by the Control Panel.

## Setting up the server

To enjoy listening to audio content stored on your server with this unit, you must set up the server in advance.

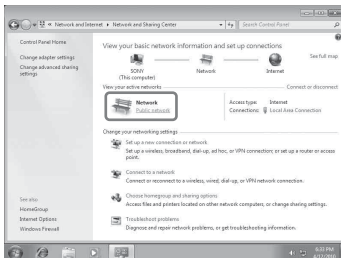
The following server devices are compatible with this unit.

- VAIO Media plus 2.0
- NAS-S500HDE, NAS-S55HDE\* HDD Network Audio System
- NAS-SV20i/SV20Di\* Network Audio System/Server
- NAC-SV10i\* Network Audio Component/Server
- Microsoft Windows Media Player 12 installed on Windows 7 (page 32)
- Microsoft Windows Media Player 11 installed on Windows Vista/XP (page 34)

\* These models may not be available in some countries/areas.

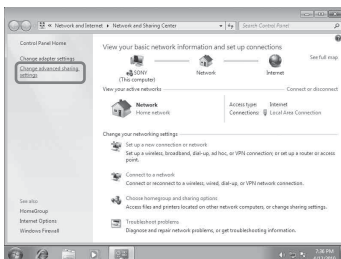
If the server has a function that limits access from other devices, you must change the setting on the server to allow the unit to access the server.

- 3** Select [Public network] under [View your active networks].  
If it shows other than [Public network], go to step 6.

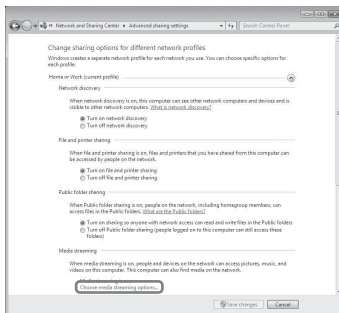


The [Set Network Location] window appears.

- 4** Select [Home network] or [Work network] according to the environment in which the unit is being used.
- 5** Follow the instructions that appear on the computer display according to the environment in which the unit is being used.
- When the settings have been completed, confirm that the item under [View your active networks] has been changed to [Home network] or [Work network] in the [Network and Sharing Center] window.
- 6** Select [Change advanced sharing settings].

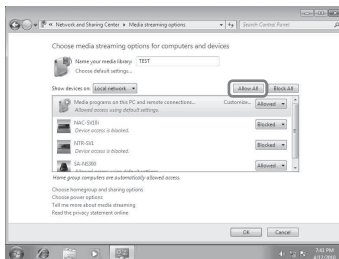


- 7** Select [Choose media streaming options...] from [Media streaming].



- 8** If [Media streaming is not turned on] appears in the Media streaming options window, select [Turn on media streaming].
- 9** Select [Allow All].

The [Allow All Media Devices] window opens. If all the devices in the local network are set to [Allowed], select [OK] and close the window.



- 10** Select [Allow all computers and media devices].
- 11** Select [OK] to close the window.
- Refer to “Listening to audio content on your server” (page 35) or “Watching/viewing content on your server” (page 44) for instructions on how to select the server.

## ■ When using a computer equipped with Windows Vista/Windows XP

This section explains how to set up Windows Media Player 11 installed on Windows Vista/Windows XP\*, as a server to connect with this unit.

For details on how to operate Windows Media Player 11, refer to the help of Windows Media Player 11.

\* Windows Media Player 11 is not manufacturer-installed on Windows XP. Access the Microsoft web site, download the installer, and then install Windows Media Player 11 on your computer.

### 1 Go to [Start] - [All Programs].

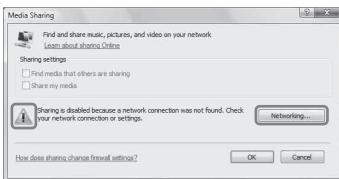


### 2 Select [Windows Media Player]. Windows Media Player 11 starts up.

### 3 Select [Media Sharing...] from the [Library] menu.

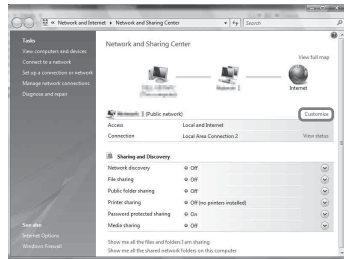
If you are using Windows XP, go to step 9.

### 4 When is displayed, select [Networking...].



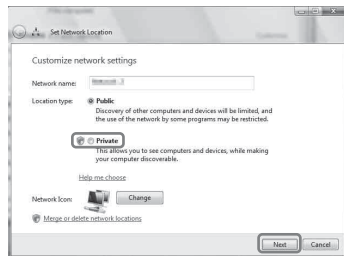
The [Network and Sharing Center] window appears.

### 5 Select [Customize].



The [Set Network Location] window appears.

### 6 Add a check mark next to [Private] and select [Next].



### 7 Confirm that the [Location type] has been changed to [Private] and select [Close].

### 8 Confirm that [(Private network)] is displayed in the [Network and Sharing Center] window and close the window.

### 9 If a check mark is not shown next to [Share my media] in the [Media Sharing] window that is displayed in step 3, add a check mark next to [Share my media], then select [OK]. A list of connectable devices is displayed.



### 10 Select [Settings...] that appears beside [Share my media to:].

- 11 Add a check mark next to [Allow new devices and computers automatically] and select [OK].

Refer to “Listening to audio content on your server” (page 35) or “Watching/viewing content on your server” (page 44) for instructions on how to select the server.

#### Note

Uncheck this item after you confirm that the unit can connect to the server and audio content on the server.

## Setting up a server other than Windows 7, Windows Vista or Windows XP

The set-up method is different depending on the server. Refer to the operating instructions of your server.

## Setting up a renderer (network controlled player)

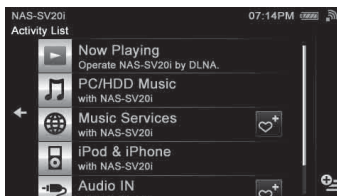
The set-up method is different depending on the device. Refer to the operating instructions of your device.

- 1 Turn the renderer (network controlled player) on.
- 2 Connect the renderer (network controlled player) to your home network.
- 3 Permit access from this unit on the renderer (network controlled player) side.

## Listening to audio content on your server

You can listen to audio content from the desired device. How to select “PC/HDD Music” as an Activity is explained in this section.

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap the “Device” tab.
- 3 Tap the desired renderer (network controlled player).  
Activities that can be played back with the selected renderer (network controlled player) are displayed.
- 4 Tap “PC/HDD Music.”



Item	Description
Now Playing	Tap to display the playback screen.
PC/HDD Music* <sup>1</sup>	Tap to listen to “PC/HDD Music.”
Music Services* <sup>1</sup>	Tap to listen to “Music Services.”
iPod & iPhone* <sup>1</sup>	Tap to listen to “iPod & iPhone.”
DAB/DAB+* <sup>1*2</sup>	Tap to listen to “DAB/DAB+.”
Audio IN* <sup>1</sup>	Tap to listen to “Audio IN.”
Use remote (IR)	Tap to display the infrared remote control screen of the selected device.

- \*1 Activities displayed on the list may change depending on the capability of the renderer (network controlled player) and the type of content supported by the server on your network.
- \*2 DAB/DAB+ is a service available only in the UK.

The server selection screen appears. Step 5 may be skipped if you select iPod & iPhone, DAB/DAB+, Audio IN or Music Services in this step. In this case, the device selected in step 3 is selected as the server automatically.

### Notes

- The playback screen of the Activity is displayed and you can check the content information if the selected Activity in step 4 is already being performed.
- You can perform the Activity even if the renderer (network controlled player) that is needed for the selected Activity has already joined a PARTY.
- When the selected Activity involves holding a PARTY, the playback screen of the PARTY host is displayed and you can check the information on the content currently being played.

### Tip

The last audio content is played back automatically until you change the server.

### Tip

You can display the server list by tapping “◆” if you did not select a server in step 5.

## 7 Tap the desired content.

Playback starts and the playback screen corresponding to the selected Activity appears.

## Playback screen

The display items and operations available may change depending on the server, renderer (network controlled player), or playback content.

### PC/HDD Music

Appears when you select “PC/HDD Music” in step 4.



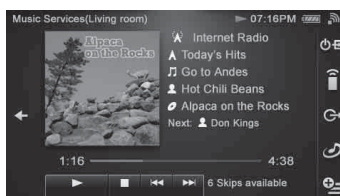
### iPod & iPhone

Appears when you select “iPod & iPhone” in step 4.

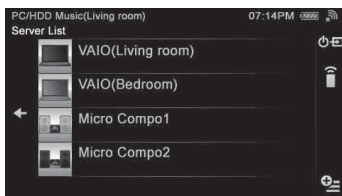


### Music Services

Appears when you select “Music Services” in step 4.

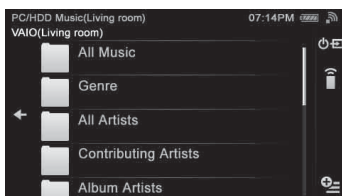


## 5 Tap the desired server.



The folder/album list of the server appears.

## 6 Tap folders/albums until you find the desired content.



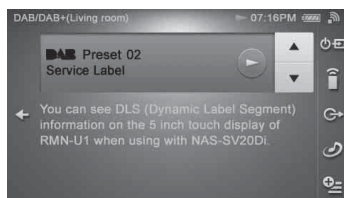
## Audio IN

Appears when you select “Audio IN” in step 4.



## DAB/DAB+

Appears when you select “DAB/DAB+” in step 4. DAB/DAB+ is a service available only in the UK.



Item	Description
Operation buttons	Tap to operate the device currently controlled.
	Tap to select the playback range.
	Tap to select the playback mode.
	Tap to display the I/O and input panel.
	Tap to display the registered device list.
	Tap to display the screen used for switching the renderer (network controlled player). <div> <p><b>Tips</b></p> <ul style="list-style-type: none"> <li>This icon does not appear in the following cases.               <ul style="list-style-type: none"> <li>During a PARTY</li> <li>While playing back content that cannot be delivered again by the server</li> </ul> </li> <li> appears during a PARTY.</li> </ul> </div>
	Tap to start a new PARTY, or control the PARTY currently being held.
	Tap to display the option menu.

Item	Description
	Tap to return to the content list. <div> <p><b>Tip</b></p> <p>The server list may appear depending on the status of the unit.</p> </div>

\* The icon displayed is different depending on the settings.

## To change the audio content currently being played back

Tap on the playback screen, then select the desired content.

## To change the Activity

Register your favorite Activities on the HOME screen of the “♥ Activity” tab (page 53).

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap the “♥ Activity” tab.
- 3 Tap the desired Activity.

## To adjust the volume level

Refer to “Controlling the volume of devices currently being controlled” (page 41).

## To change the playback mode

Tap to change the playback mode. The following playback modes are available:

- Normal
- Repeat
- Repeat 1 Song
- Random
- Shuffle
- Shuffle&Repeat

### Note

Some playback modes may not be available depending on the renderer (network controlled player).

## To change the playback range

Tap the playback range icon to change the playback range.

The following playback ranges are available:

- Current Folder
- Parent Folder

## To delete a server

You can delete a server you do not want to display on the screen.

- 1 Tap and hold the server you want to delete in step 5 of "Listening to audio content on your server" (page 35).

A menu appears.

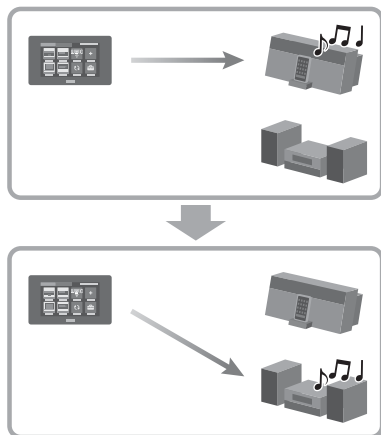
- 2 Tap "Delete."


The selected server is deleted.

### Tip

The server on your home network is displayed on the server list of this unit even if you have deleted it before. Disconnect your server if you do not want to display it on the server list from your home network. Refer to the operating manual of your server for details.

## Changing the renderer (network controlled player) currently being used



- 1 Tap  on the side menu while playing back content.


The renderer (network controlled player) list appears.

- 2 Tap the desired renderer (network controlled player).

- 3 Tap "OK."


The audio content is played back on the selected device.

### Notes

- You may not be able to change the renderer (network controlled player) if the selected content has restrictions on streaming.
-  does not appear in the following cases.
  - During a PARTY
  - While playing back content that cannot be delivered again by the server

## To add a renderer (network controlled player)

You can add a device with the PARTY STREAMING function as a renderer (network controlled player).

- 1 Tap  on the side menu while playing back content.  
The list of devices that are utilizing the PARTY STREAMING function is displayed.
- 2 Select the desired renderer (network controlled player).

### Tip

All devices are selected with the default setting.

- 3 Tap "OK."

### Note

You cannot select a device which has joined another PARTY or is turned off.

# Using the PARTY STREAMING function

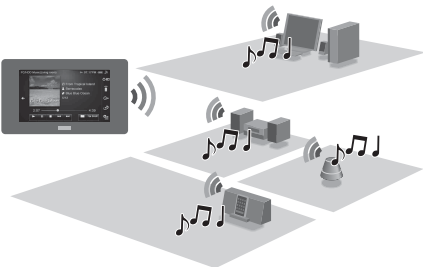
The PARTY STREAMING function is explained below.

- You can listen to the audio content that is currently being played back on the PARTY host (delivers audio content) for PARTY guests (receives audio content from the PARTY host).
- You can deliver audio content to multiple PARTY guests.

PARTY STREAMING is a convenient function allowing you to enjoy audio content via multiple devices at the same time.



You can enjoy the PARTY STREAMING function with other devices that have this PARTY STREAMING logo.



## Starting a new PARTY

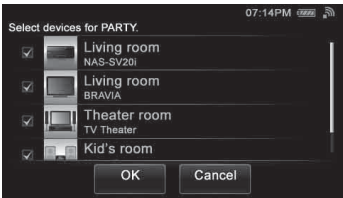
- 1 Press HOME on the unit.  
The HOME screen appears.

- 2 Tap the “♡ Activity” tab.

- 3 Tap “☺ Start PARTY.”

The list of devices that are utilizing the PARTY STREAMING function is displayed.

- 4 Select the device that you want to allow to participate the PARTY, then tap “OK.”



The list for the PARTY appears.

### Tips

- All devices are selected with the default setting.
- Devices that do not support the PARTY STREAMING function or the selected music content are not displayed.
- You can start another PARTY by selecting devices are available, even if you are already holding a PARTY.

- 5 Tap the desired Activity.


The PARTY starts and the server list appears.

- 6 Tap the desired server.

The content list of the server appears.

- 7 Tap folders/albums until you find the desired content.

### Notes

- You can also start the PARTY by tapping  during playback of audio content on a renderer (network controlled player). Refer to “To add a renderer (network controlled player)” (page 38).
- Only devices with the PARTY STREAMING function are displayed.
- You cannot select a device which has joined another PARTY or is turned off.


---

## Controlling the PARTY currently being held

---

- 1** Press HOME on the unit.  
The HOME screen appears.
- 


- 2** Tap the “♥ Activity” tab.
- 

- 3** Tap  PARTY List.  
The PARTY icon list of the devices that are holding a PARTY appears.
- 

- 4** Tap the desired PARTY from the list.  
The DLNA controller screen of the selected PARTY appears.
- 

- 5** Control the selected PARTY.


### To change devices currently participating in the PARTY

- 1** Tap  on the side menu during the PARTY.  
The renderer (network controlled player) list appears.
- 2** Tap the desired renderer (network controlled player).


- 3** Tap “OK.”

The audio content is played back on the selected device.

### To close the PARTY

Tap  on the side menu during the PARTY.

#### Tip

You can close a PARTY by tapping “Close PARTY” on the option menu list after first tapping  on the side menu during the PARTY.

You can also close the PARTY by selecting “Close PARTY” on the menu list by pressing the desired PARTY for a few seconds in step 4.

### To adjust the volume level


Refer to “Controlling the volume of devices currently being controlled” (page 41).

# Useful functions

## Controlling the volume of devices currently being controlled

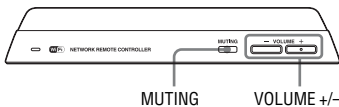
You can adjust the volume level of all devices currently being controlled at the same time. You can also adjust the volume level of each device separately.

**Tip**

Tap  on the side menu if you are listening to audio content via an infrared device.

- 1 Press the VOLUME +/- or MUTING button on the unit.

The screen used for adjusting the volume appears.



- 2 Tap the screen to adjust the volume level.

You can also adjust the volume using the VOLUME +/- button on the unit.

## To turn off the sound of all devices currently being controlled


Press the MUTING button on the unit.

## Searching for content using the Keyword Search function

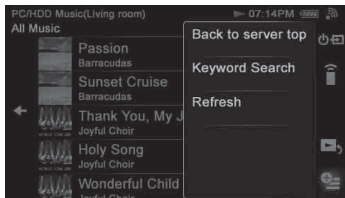
You can enter a keyword to search for the desired item. This function can be used while the content list of the “PC/HDD Music” screen is displayed. The scope for search is all content on the server.

**Notes**

- You cannot use this function with a server that does not have the content search by keyword function.
- You can search only for content within Windows Media Player 12 when it is used as a server.
- You cannot search for a folder.

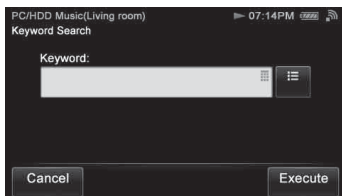
- 1 Tap  on the side menu when the list of an item (artist list, track list, etc.) is displayed.

- 2 Tap “Keyword Search.”




A keyword text box appears.

- 
- 3** Enter a keyword.  
For details on how to input characters, see “Entering text” (page 19).




**Tip**

You can select a keyword from the input history by tapping .

- 
- 4** Tap “Execute” when you finish entering a keyword.  
“Searching...” appears. When the unit finishes searching, items that match the keyword appear.

- 
- 5** Tap the desired item.

**Tip**

The content list of the folder appears when you tap  while the playback screen is displayed after you have selected content in this step.

- 
- 1** Press HOME on the unit.  
The HOME screen appears.

- 
- 2** Tap the “Device” tab.

- 
- 3** Tap the device which is currently playing back content.  
The Activity list appears.

- 
- 4** Tap “Now Playing.”  
The playback screen of the selected device appears.

---

## Operating other renderers (network controlled player)

You can check the status of the specified device by displaying the playback screen on the unit. Using this screen, you can also adjust the volume level and perform playback operations.

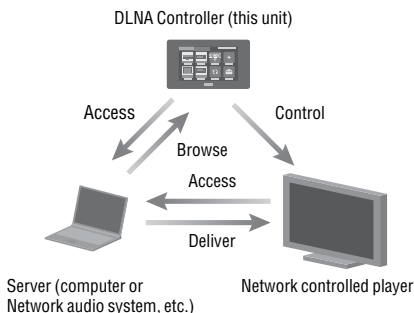
**Note**

You cannot use this function in the following cases:

- The renderer (network controlled player) has set access limitations
- The specified device is not playing back anything

# Watching/viewing content on your server

You can enjoy video/photo content from anywhere by controlling the DLNA-compliant devices on your home network.



## Setting up the server

To enjoy watching video content or viewing photos stored on your server with this unit, you must set up the server in advance.

The following server devices are compatible with this unit.

- VAIO Media plus 2.0
- Microsoft Windows Media Player 12 installed on Windows 7 (page 43)
- Microsoft Windows Media Player 11 installed on Windows Vista/XP (page 43)

If the server has a function that limits access from other devices, you must change the setting on the server to allow the unit to access the server.

This section explains how to set up Windows Media Player when using it as a server.

For details on the settings of other server devices, refer to the operating manuals or help of the respective devices or applications.

### Note

The items displayed on the computer may be different from the ones shown in this section, depending on the version of the operating system or the computer environment. For details, refer to the help of your operating system.

### ■ When using a computer equipped with Windows 7

Perform the steps outlined in “When using a computer equipped with Windows 7” (page 32). If you have already finished the settings, go to “Watching/viewing content on your server” (page 44).

### ■ When using a computer equipped with Windows Vista/Windows XP

Perform the steps outlined in “When using a computer equipped with Windows Vista/Windows XP” (page 34).

If you have already finished the settings, go to “Watching/viewing content on your server” (page 44).

### Setting up a server other than Windows 7, Windows Vista or Windows XP

The set-up method is different, depending on the server. Refer to the operating instructions of your server.

### Setting up a renderer (network controlled player)

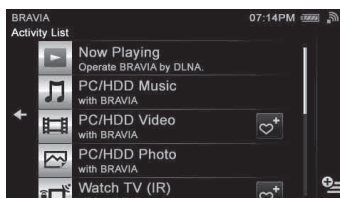
The set-up method is different, depending on the device. Refer to the operating instructions of your device.

- 1** Turn the renderer (network controlled player) on.
- 2** Connect the renderer (network controlled player) to your home network.
- 3** Permit access from this unit on the renderer (network controlled player) side.

## Watching/viewing content on your server

You can watch video content or view photos from the desired device. Selecting “PC/HDD Video” as an Activity is explained in this section.

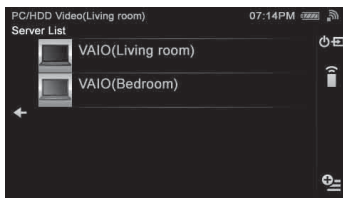
- 1** Press HOME on the unit.  
The HOME screen appears.
- 2** Tap the “Device” tab.
- 3** Tap the desired renderer (network controlled player).  
Activities that can be played back with the selected renderer (network controlled player) are displayed.
- 4** Tap the desired Activity.



Item	Description
Now Playing	Tap to display the playback screen.
PC/HDD Video	Tap to play back “PC/HDD Video.”
PC/HDD Photo	Tap to display “PC/HDD Photo.”
Use remote (IR)	Tap to display the infrared remote control screen of the selected device.

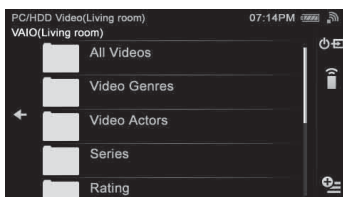
The server selection screen appears.

## 5 Tap the desired server.



The content list of the server appears.

## 6 Tap folders until you find the desired content.



## 7 Tap the desired content.

Playback starts and the playback screen corresponding to the selected Activity appears.

## Playback screen

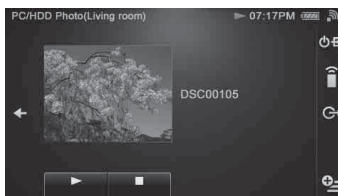
### PC/HDD Video

Appears when you select “PC/HDD Video” in step 4.



### PC/HDD Photo

Appears when you select “PC/HDD Photo” in step 4.



Item	Description
Operation buttons	Tap to operate the device currently controlled. <b>Tip</b> You can hide the photo image by tapping ■. The photo image re-appears when you tap ► again.
	Tap to display the I/O and input panel.
	Tap to display the registered device list.
	Tap to display the screen used for switching the renderer (network controlled player). <b>Tip</b> This icon does not appear while playing back content that cannot be delivered again.
	Tap to display the option menu.
	Tap to return to the content list. <b>Tip</b> The server list may appear depending on the status of the unit.

## To change the Activity

Register your favorite Activities on the HOME screen of the “♥ Activity” tab (page 53).

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap the “♥ Activity” tab.
- 3 Tap the desired Activity.

## To adjust the volume level

Refer to “Controlling the volume of devices currently being controlled” (page 47).

## To delete a server

You can delete a server you do not want to display on the screen.

- 1 Tap and hold the server you want to delete in step 5 of “Watching/viewing content on your server” (page 44).


A menu appears.

- 2 Tap “Delete.”

The selected server is deleted.

### Tip

The server on your home network is displayed on the server list of this unit even if you have deleted it before. Disconnect your server if you do not want to display it on the server list from your home network. Refer to the operating manual of your server for details.

- 1 Tap  on the side menu while playing back content.

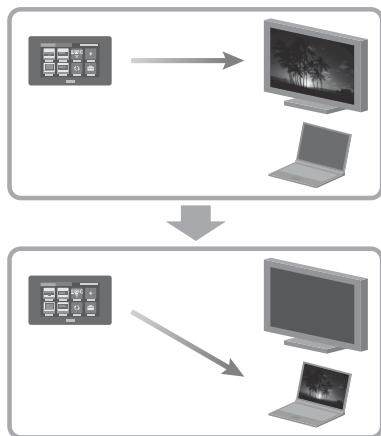
The renderer (network controlled player) list appears.

- 2 Tap the desired renderer (network controlled player).

- 3 Tap “OK.”

The video content or photo is displayed on the selected device.

## Changing the renderer (network controlled player) currently being used




# Useful functions

## Controlling the volume of devices currently being controlled

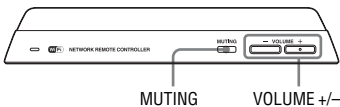
You can adjust the volume level of all devices currently being controlled at the same time. You can also adjust the volume level of each device separately.

**Tip**

Tap  on the side menu if you are listening to audio content via an infrared device.

- 1 Press the VOLUME +/- or MUTING button on the unit.

The screen used for adjusting the volume appears.



- 2 Tap the screen to adjust the volume level.

You can also adjust the volume using the VOLUME +/- button on the unit.

## To turn off the sound of all devices currently being controlled


Press the MUTING button on the unit.

## Searching for content using the Keyword Search function (Video only)

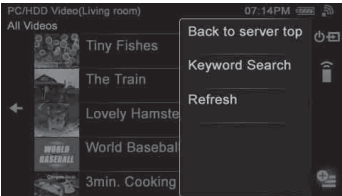
You can enter a keyword to search for the desired item. This function can be used while the content list of the “PC/HDD Video” screen is displayed. The scope for search is all content on the server.

**Notes**

- You cannot use this function with a server that does not have the content search by keyword function.
- You can search only for content within Windows Media Player 12 when it is used as a server.
- You cannot search for a folder.

- 1 Tap  on the side menu when the list of an item (folder title, content title, etc.) is displayed.

- 2 Tap “Keyword Search.”

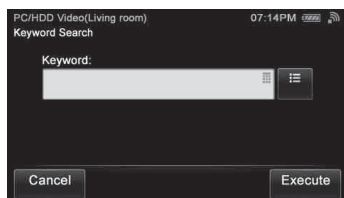


A keyword text box appears.


---

## 3 Enter a keyword.

For details on how to input characters, see “Entering text” (page 19).



### Tip

You can select a keyword from the input history by tapping .

---

## 4 Tap “Execute” when you finish entering a keyword.

“Searching...” appears. When the unit finishes searching, items that match the keyword appear.

---

## 5 Tap the desired item.

### Tip

The content list of the folder appears when you tap “◀” while the playback screen is displayed after you have selected content in this step.

---

## Operating other renderers (network controlled player)

You can check the status of the specified device by displaying the playback screen on the unit.

### Note

You cannot use this function in the following cases:

- The renderer (network controlled player) has set access limitations
- The specified device is not playing back anything.

---

## 2 Tap the “Device” tab.

---

## 3 Tap the device which is currently playing back content.

The Activity list appears.

---

## 4 Tap “Now Playing.”

The video or photo image currently being displayed on the selected device appears.

# Adding and using infrared devices

You can register and operate infrared devices that are not DLNA-compliant.

After you register an Activity with the registered device, you can use the appropriate remote control, depending on the desired Activity, such as “Watch TV (IR)” or “Listen to music (IR),” etc.

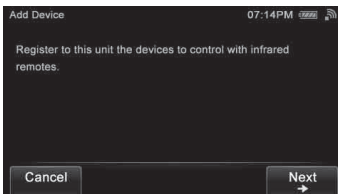
## Adding an infrared device

- 1 Press HOME on the unit.  
The HOME screen appears.

- 2 Tap the “Device” tab.

- 3 Tap “+ Add Device.”  
A confirmation screen appears.

- 4 Tap “Next ➔.”



- 5 Tap “Select from preset data,” then tap “Next ➔.”

- 6 Tap the correct type for your device, then tap “Next ➔.”

- 7 Tap the vendor of your device, then tap “Next ➔.”

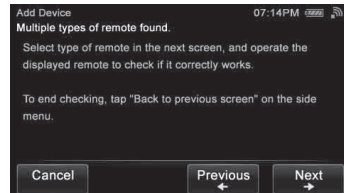
A confirmation screen appears.

Steps 8 to 11 will be skipped if there is only one candidate for the remote code. Go to step 12.

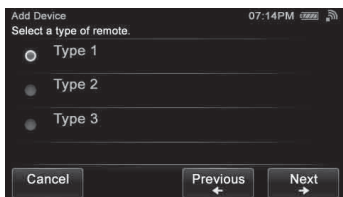
### Tip

When you cannot find the vendor name, tap “Previous ◀” repeatedly to return to the screen of step 5. Then perform steps 5 to 10 as outlined in “Programming the desired remote code” (page 51).

- 8 Tap “Next ➔.”



- 
- 9** Tap the remote type, then tap “Next ➔.”



The infrared remote control screen appears.

**Tip**

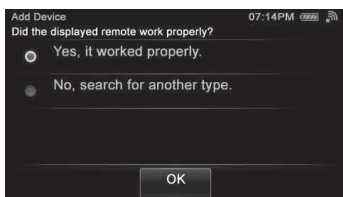
Select “Type 1” initially. You can check whether it is working properly in the next step.

- 
- 10** Check whether the selected remote type work properly, then tap ↻ on the side menu.



A confirmation screen appears.  
Repeat steps 9 and 11 until you find the correct remote code.

- 
- 11** Tap “Yes, it worked properly.” then tap “OK.”

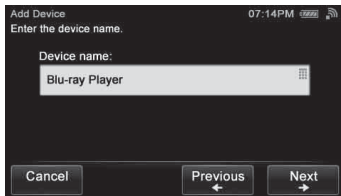


The device name input screen appears.

**Tip**

Tap “No, search for another type.” if the selected remote type did not work properly.

- 
- 12** Tap the device name box.

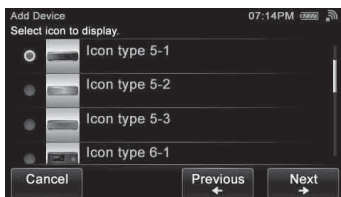


- 
- 13** Enter the device name.

For details on how to input characters, see “Entering text” (page 19).

- 
- 14** Tap “Next ➔.”

- 
- 15** Tap the desired device icon, then tap “Next ➔.”



- 
- 16** Tap the desired group, then tap “Next ➔.”



A confirmation screen appears.

- 
- 17** Tap “OK.”

## Programming the desired remote code

You can program the remote code so that this unit can control devices that it is normally unable to control.

- 1 Press HOME on the unit.  
The HOME screen appears.

- 2 Tap the "Device" tab.

- 3 Tap "+ Add Device."  
A confirmation screen appears.

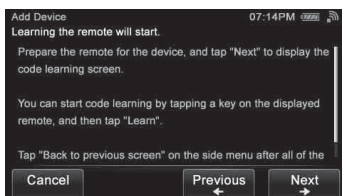
- 4 Tap "Next ➔."



- 5 Tap "Learn," then tap "Next ➔."

- 6 Tap the correct type for your device, then tap "Next ➔."  
A confirmation screen appears.


- 7 Tap "Next ➔."



The key learning screen appears.

- 8 Tap the key where you want to store the new command.  
A menu appears.




You can change the page by tapping  on the side menu.

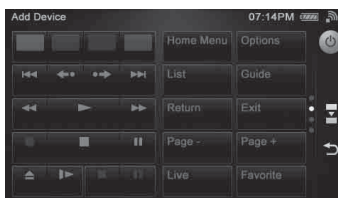
- 9 Tap "Learn."  
Instructions on how to store the new command are displayed.

- 10 Program the remote code to the key of the remote screen referring to the on-screen instructions.



When programming remote control keys, it may help to tap and hold the key you are programming a little longer.

- 11 Tap  on the side menu.



A confirmation screen appears.

- 12 Tap "Yes."

# Useful function

---

## Using the Smart Select function

This function allows the unit to find the target device by using the infrared function.

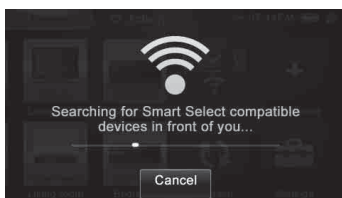
- 
- 1** Press HOME on the unit.  
The HOME screen appears.

---

  - 2** Tap the “Device” tab.

---

  - 3** Tap “Smart Select.”  
“Searching for Smart Select compatible devices in front of you...” appears.



The Activity list appears when the unit has found the device.

- 
- 4** Tap the desired Activity.

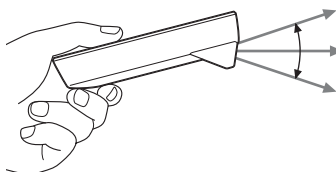
### Note

This function can be used when the Smart Select function of the Sony device is activated.

---

## Using the unit as an infrared remote control

You can use this unit as an infrared remote control. Be sure the unit is facing towards the remote sensor of the device after adjusting the angle referring to the following illustration.



# Registering an Activity

This function allows you to find the desired Activity easily after registering it in the Activity list.

The Activity is carried out when you tap that Activity from the Activity list.

By registering the Activity on the HOME screen of the “♡ Activity” tab, you can perform several commands (for example, selecting a device and playing back content) by just tapping the Activity icon.

## About a DLNA Activity



You can select an Activity of the selected device after tapping the device on the “Device” tab on the Home screen after the unit recognizes that DLNA device. These registrations are performed automatically. Also you do not need turn the server and renderer (network controlled player) on other than the first time.

The server list is displayed after you select the desired Activity, then select a server and the content to be played back using the selected renderer (network controlled player).

You can operate it using the DLNA controller screen (page 15).

### Tips

- Since a server is selected automatically, the server list may not appear, depending on the combination of the selected device and Activity.

- If you want to use the infrared device in a DLNA device Activity, refer to “Using an infrared device in a DLNA Activity” (page 63).

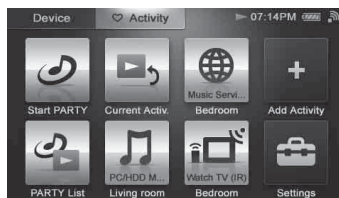
## Registering a DLNA Activity on the HOME screen of the “♡ Activity” tab

When you register an Activity on the HOME screen of the “♡ Activity” tab, you can perform several commands (for example, selecting a device and playing back content) by just tapping the Activity icon.

- 1 Press HOME on the unit.  
The HOME screen appears.

- 2 Tap the “♡ Activity” tab.

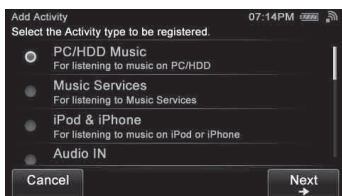
- 3 Tap “+ Add Activity.”



### Tip

A confirmation screen appears if you are performing the Activity. Tap “OK” and go to step 4.

## 4 Tap the desired DLNA Activity, then tap “Next ➔.”



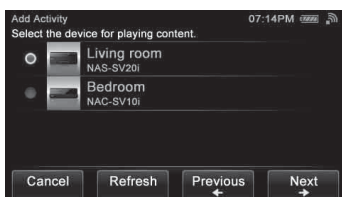
You can select any of the following as an Activity.

- PC/HDD Music
- Music Services
- iPod & iPhone
- DAB/DAB+
- Audio IN
- PC/HDD Video
- PC/HDD Photo

### Tip

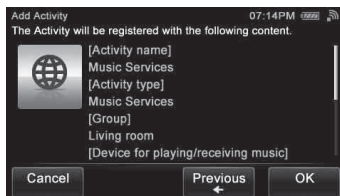
The Activity type is displayed under the Activity name.

## 5 Tap the desired renderer (network controlled player), then tap “Next ➔.”



A confirmation screen appears.

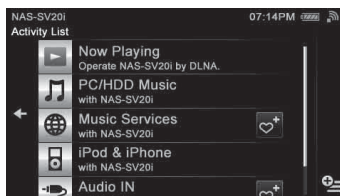
## 6 Tap “OK.”



The selected Activity is registered on the HOME screen of the “♥ Activity” tab.

## To register a DLNA Activity using the Activity list of the “Device” tab

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap the “Device” tab.
- 3 Tap the desired device.  
The Activity list appears.
- 4 Tap ♥\* beside the desired Activity.



A confirmation screen appears.

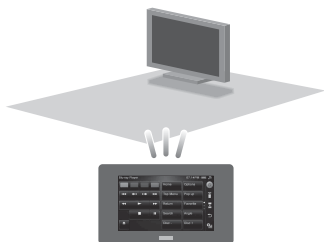
### Tip

♥\* is displayed beside any Activity that is not registered on the HOME screen of the “♥ Activity” tab.

## 5 Tap “OK.”

The selected Activity is registered on the HOME screen of the “♥ Activity” tab.

## About an infrared Activity



This function allows you to turn the power supply on and carry out input operations automatically just by tapping the infrared Activity icon. While the Activity is being carried out, you can also control each device by tapping the corresponding remote key.

### Note

The power operation of each device is registered automatically when you register the Activity.

## Registering an infrared Activity

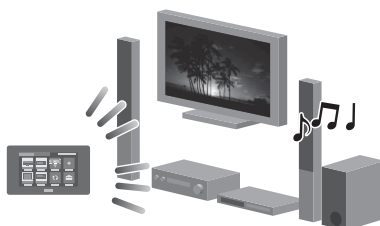
You can register several commands in a sequential order on a registered device as an Activity after registering the desired device. This section explains how to enjoy video content from a BD player with a TV and a receiver.

### Tip

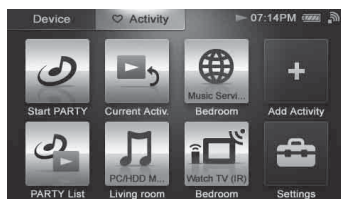
The following steps change depending on the selected Activity and devices.

### Note

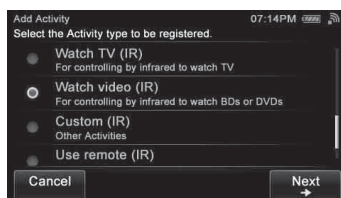
You have to register infrared devices you want to use with this unit in advance. Refer to “Adding and using infrared devices” (page 49) for details on how to register infrared devices.



- 1 Register the BD player, TV and receiver you want to use with this unit (page 49).
- 2 Press HOME on the unit.  
The HOME screen appears.
- 3 Tap the “♥ Activity” tab.
- 4 Tap “+ Add Activity.”



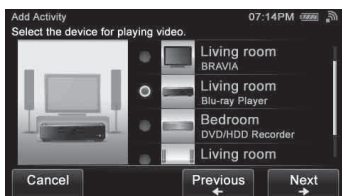
- 5 Tap “Watch video (IR)” then tap “Next ➡.”



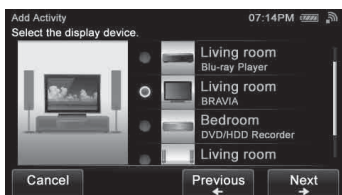
### Tip

The Activity type is displayed under the Activity name.

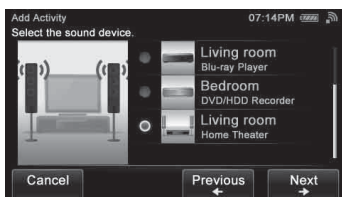
- 6** Tap the device for playing video, then tap “Next ➡.”



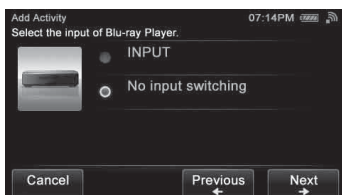
- 7** Tap the device for displaying images, then tap “Next ➡.”



- 8** Tap the device for outputting sound, then tap “Next ➡.”



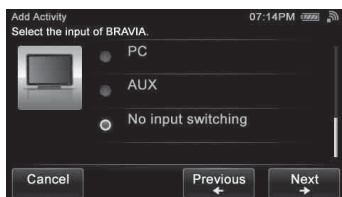
- 9** Tap the desired input operation of the device for playing video, then tap “Next ➡.”



**Tip**

If you do not want to switch the input, tap “No input switching,” then tap “Next ➡.”

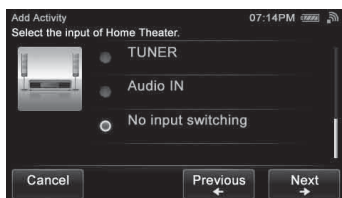
- 10** Tap the desired input operation of the device for displaying images, then tap “Next ➡.”



**Tip**

If you do not want to switch the input, tap “No input switching,” then tap “Next ➡.”

- 11** Tap the desired input operation of the device for outputting sound, then tap “Next ➡.”

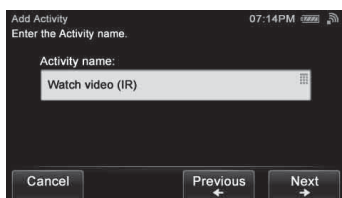


The Activity name screen appears.

**Tip**

If you do not want to switch the input, tap “No input switching,” then tap “Next ➡.”

- 12** Check the Activity name, then tap “Next ➡.”



**Tip**

You can change the Activity name by tapping the Activity name box.  
For details on how to input characters, see “Entering text” (page 19).

## 13 Tap the desired Activity icon, then tap “Next ➡.”



## 14 Tap the group of the desired Activity, then tap “Next ➡.”

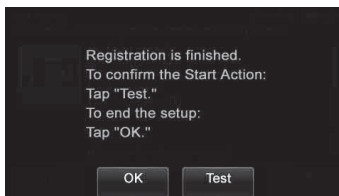


A confirmation screen appears.

## 15 Tap “OK.”

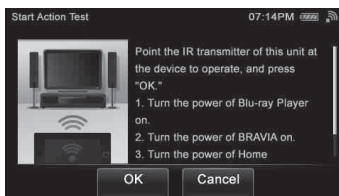


## 16 Tap “Test.”



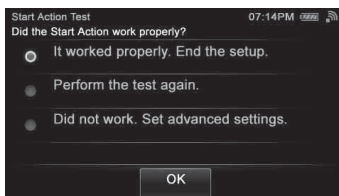
“Start Action Test” screen appears.

## 17 Be sure the unit is facing towards the remote sensor of the desired device referring to the on-screen instructions when you tap “OK” to check the actions registered.



The test starts.

## 18 Tap “It worked properly. End the setup.” then tap “OK.”

**Note**

Refer to “Editing a registered Activity” (page 62) if the power switching and input operations do not work correctly.

### To perform a retest

Tap “Perform the test again.” and tap “OK” in step 18.

## To edit the actions registered

Tap “Did not work. Set advanced settings.” and tap “OK” in step 18.

## Registering a device remote on the HOME screen of the “♥ Activity” tab

You can also register the remote control on the HOME screen of the “♥ Activity” tab.

**1** Press HOME on the unit.  
The HOME screen appears.

**2** Tap the “♥ Activity” tab.

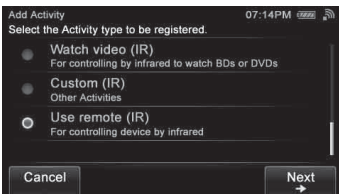
**3** Tap “+Add Activity.”



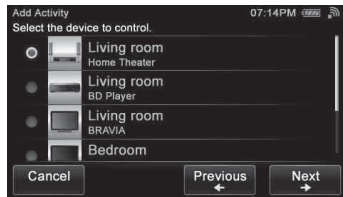
### Tip

A confirmation screen appears if you are performing the Activity. Tap “OK” and go to step 4.

**4** Tap “Use remote (IR)” then tap “Next ➔.”

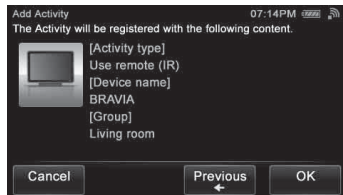


**5** Tap the desired device, then tap “Next ➔.”



A confirmation screen appears.

**6** Tap “OK.”

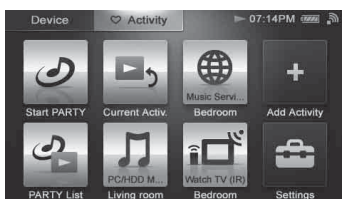


# Using the Activity function

- 1 Press HOME on the unit.  
The HOME screen appears.

- 2 Tap the “♥ Activity” tab.

- 3 Tap the desired Activity icon.



The selected Activity is carried out.

## To edit the registered Activity

Refer to “Editing a registered Activity” (page 62).

## To delete an item from the HOME screen of the “♥ Activity” tab

- 1 Tap and hold the Activity icon you want to delete in step 3.  
A menu appears.
- 2 Tap “Delete Activity.”  
A confirmation screen appears.

### Tip

“Delete Remote” appears when you select “Use remote (IR)” as an Activity.

- 3 Tap “OK.”  
The selected item is deleted from the HOME screen of the “♥ Activity” tab.
- 4 Tap “Close.”


# Editing registered device information

You can edit registered device information. You can change the device icon, or the group name that was given automatically.

**1** Press HOME on the unit.  
The HOME screen appears.

**2** Tap the “Device” tab.

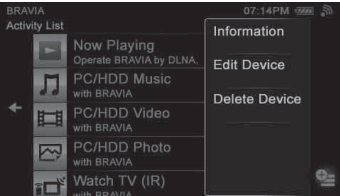
**3** Tap the desired device.

**4** Tap .  
The option menu appears.

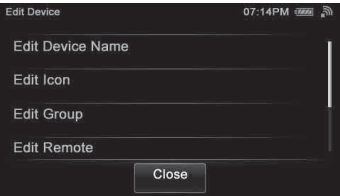
**Tip**

You can also display the menu by tapping and holding the desired device in step 3.

**5** Tap “Edit Device.”



**6** Tap the item you want to edit.



Menu item	Description
Edit Device Name	Tap to change the device name.
Edit Icon	Tap to change the device icon.
Edit Group	Tap to change the group.
Edit Remote*	Tap to edit the remote control. Refer to “Editing a device remote control” (page 65).
Reset Remote*	Tap to reset the remote control.
Merge Two Devices Into One*	Tap to merge an infrared device to a DLNA device. Refer to “Merging with an infrared device to a renderer (network controlled player)” (page 67).

\* The menu item may not appear, depending on the device selected.

**7** Edit the desired item following the on-screen instructions.

## To check the device information

Tap “Information” in step 5.

## To delete the device

- 1** Tap “Delete Device” in step 5.  
A confirmation screen appears.
- 2** Tap “OK.”  
The selected device is deleted.
- 3** Tap “Close.”

### **Tip**

Devices on your home network are displayed on the device list of this unit even if you have deleted them before. Disconnect any devices you do not want to display on the device list from your home network. Refer to the operating manual of your device for details.

# Editing a registered Activity

You can edit registered Activities. You can also delete an Activity from the list of registered Activities.

- 1

Press HOME on the unit.

The HOME screen appears.
- 2

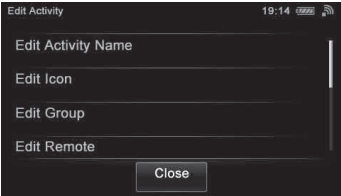
Tap the “♥ Activity” tab.
- 3

Tap and hold the Activity you want to edit.

A menu appears.
- 4

Tap “Edit Activity.”
- 5

Tap the item you want to edit.



Menu item	Description
Edit Activity Name	Tap to change the Activity name.
Edit Icon	Tap to change the Activity icon.
Edit Group	Tap to edit the group setting of a registered Activity.
Edit Remote	Tap to edit the remote control. Refer to “Editing an Activity remote control” (page 66).

Menu item	Description
Edit Device/Start Action	Tap to edit the device you want to use. Refer to “Using an infrared device in a DLNA Activity” (page 63).
Interval Setting	Tap to adjust the interval when you feel it too long or short to start the IR Activity (page 55). Check the setting using “Start Action Test” to find whether the switching between the power and the input operation works correctly.
Start Action Test	Tap to check whether the switching between the power and the input operation works correctly.

- 6

Edit the desired item following the on-screen instructions.

**To check the Activity information**  
Tap “Information” in step 4.

**To delete an Activity from an infrared device**

- 1

Tap and hold the Activity you want to delete in step 3.

A menu appears.
- 2

Tap “Delete Activity.”

A confirmation screen appears.
- 3

Tap “OK.”

The selected Activity is deleted.
- 4

Tap “Close.”

**Tip**  
You can delete Activities that you have added manually.

## Using an infrared device in a DLNA Activity

When you perform a registered DLNA Activity, in addition to using DLNA devices, you can also use infrared devices. You can turn the infrared device on or off, switch input operations, and adjust the volume level.

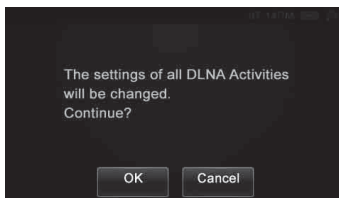
This operation is useful when you want to output the sound from a receiver connected to the renderer (network controlled player), etc. This section explains how to enjoy content from a receiver connected to the renderer (network controlled player).

### Note

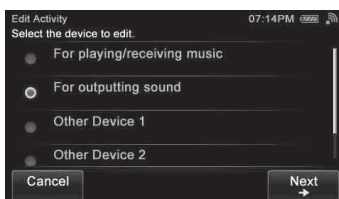
You have to register infrared devices you want to use with this unit in advance. Refer to “Adding and using infrared devices” (page 49) for details on how to register infrared devices.

- 1 Press HOME on the unit.  
The HOME screen appears.
- 2 Tap the “Device” tab.
- 3 Tap the desired DLNA-compliant device.  
The Activity list appears.
- 4 Tap and hold the desired Activity.  
A menu appears.
- 5 Tap “Edit Activity.”
- 6 Tap “Edit Device/Start Action.”  
A confirmation screen appears.

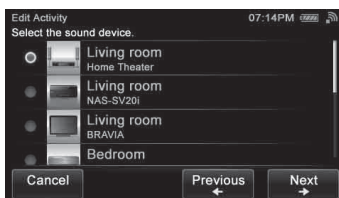
- 7 Tap “OK.”



- 8 Tap “For outputting sound,” then tap “Next ➔.”



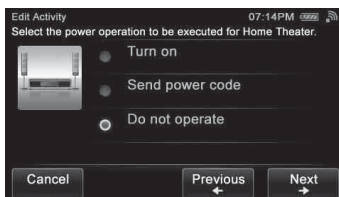
- 9 Tap the device for outputting sound, then tap “Next ➔.”



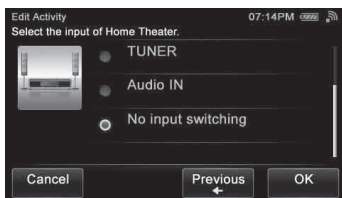
### Note

The items that can be selected are different, depending on the device.

- 10 Tap the desired power operation of the device for outputting sound.



- 
- 11** Tap the desired input operation of the device for outputting sound, then tap “OK.”

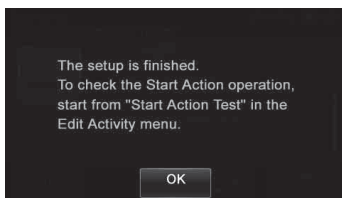


A confirmation screen appears.

**Tip**

If you do not want to switch the input, tap “No input switching,” then tap “Next ➤.”

- 
- 12** Tap “OK.”



**Tip**

Refer to “Start Action Test” (page 62).

## Adding an air-conditioner's functions to this unit

If you adjust the setting of an air-conditioner according to the season, reset the parameters of the air conditioner's remote control (temperature, air strength and direction, etc.), and register the new remote signals with the unit.

When the power button on the remote control for an air-conditioner, etc., toggles between power-on and off with each press, the power-on/off operation may not be registered correctly. In this case, register the power-on/off signals to two separate keys of the remote screen.

- 1** Register the power-on signal to a key (transmit the power-on signal by pressing the power button when the device is turned off).

- 2** Register the power-off signal to another key (transmit the power-off signal by pressing the power button when the device is turned on).  
The two learned keys of the unit now control the power-on/off signals of the device, respectively.

**Note**

Devices such as air conditioners and heaters receiving an infrared signal can be dangerous if misoperated.


# Editing a registered remote control

You can edit an infrared remote control registered.

**Note**

You cannot edit the DLNA remote control.

**Tip**


You can switch the remote screen by tapping  on the side menu.

## Editing a device remote control

**1** Press HOME.  
The HOME screen appears.

**2** Tap the “Device” tab.

**3** Tap the desired device.  
The Activity list appears.

**4** Tap .  
The option menu appears.

**Tip**

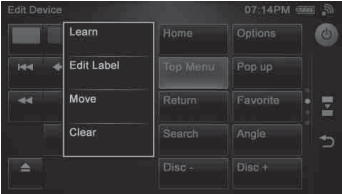
You can also display a menu by tapping and holding the desired device in step 3.

**5** Tap “Edit Device.”

**6** Tap “Edit Remote.”  
The screen used for editing the remote control of a device appears.

**7** Tap the desired key.  
The following items appear.

**8** Tap the desired item.



Menu item	Description
Learn	You can program the remote code to a key of the remote screen.
Edit Label	You can edit the label of a key of the remote screen. <b>Note</b> This item appears when you tap a key that is displayed with a label.
Move	You can move the key position. <b>Note</b> This item appears when you tap a key that is displayed with a label.
Clear	You can also clear the remote code which is being programmed to a key of the remote screen.

**9** Edit the item following the on-screen instructions.

# Editing an Activity remote control

- 1

Press HOME.

The HOME screen appears.
- 2

Tap the “♥ Activity” tab.
- 3

Tap and hold the Activity you want to edit.

A menu appears.
- 4

Tap “Edit Activity.”
- 5


Tap “Edit Remote.”

The screen used for editing the remote control of a device appears.
- 6

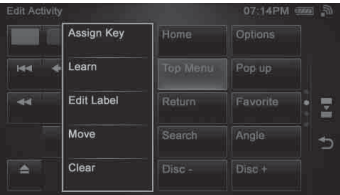
Tap the desired key.

The following items appear.

Tip

You can switch the remote screen by tapping  on the side menu.
- 7

Tap the desired item.



Menu item	Description
Learn	You can program the remote code to a key of the remote screen.
Edit Label	You can edit the label of the key of the remote screen. <div><div>Note</div><p>This item appears when you tap a key that is displayed with a label.</p></div>
Move	You can move the key position. <div><div>Note</div><p>This item appears when you tap a key that is displayed with a label.</p></div>
Clear	You can also clear the remote code which is being programmed to a key of the remote screen.

- 8

Edit the item following the on-screen operations.

Menu item	Description
Assign Key	You can assign a remote key of the device which is used on the Activity, to a key of the remote screen.

# Merging with an infrared device to a renderer (network controlled player)

If, after adding an infrared device, you find the device has been registered, the two instances of the same device can be treated as one device. The Activity of the infrared device also will be merged with the Activity of the DLNA device automatically.


**Notes**

- This item can be selected when you select a registered infrared device in step 3. Refer to “Adding an infrared device” (page 49).
- The infrared device is deleted from the HOME screen of the “Device” tab after performing this operation.

**1** Press HOME on the unit.  
The HOME screen appears.

**2** Tap the “Device” tab.

**3** Tap the desired device.  
The Activity list appears.

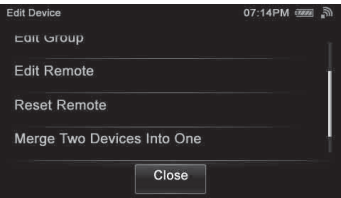
**4** Tap .  
The option menu appears.

**Tip**

You can also display a menu by pressing and holding the desired device in step 3.

**5** Tap “Edit Device.”

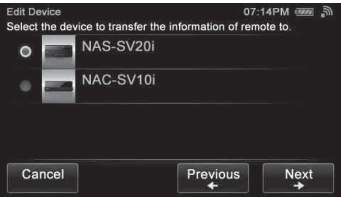
**6** Tap “Merge Two Devices Into One.”



A confirmation screen appears.

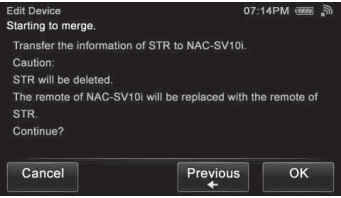
**7** Tap “Next ➔.”

**8** Tap the device you want to merge, then tap “Next ➔.”



A confirmation screen appears.

**9** Tap “OK.”



**10** Tap “Close.”

The selected device is treated as one device.

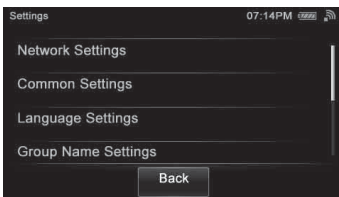
# Changing settings

You can set or change the various settings. Do the following to change a setting.


- 
- 1** Press HOME on the unit.  
The HOME screen appears.

- 
- 2** Tap “ Settings.”

- 
- 3** Tap the desired menu item.  
The following settings can be selected.
    - Network Settings
    - Common Settings
    - Language Settings
    - Group Name Settings
    - System Update
    - Device Details



## Note

A confirmation screen appears when you tap “ Settings” on the screen while you are performing the Activity. Tap “OK” if you want to change the settings. The Activity currently being performed will be canceled in this case.

- 
- 4** Tap the item repeatedly until you complete the settings.

---

## Network Settings

Refer to “Connecting the unit to your home network (network settings)” (page 23).

---

## Common Settings

Menu item	Parameter	Description
Beep Settings	ON	You can set the beep sound to ON.
	OFF	You can set the beep sound to OFF.
Clock Settings	Date&Time Settings	You can select the time setting method (page 30).
	Time Display Format	You can select the time display format.
	Daylight Saving	You can select the summer time settings.
Screen Off Timer	You can select the duration of time until the screen is turned off automatically. You can select whether or not to activate the screen off timer (page 19).	
Brightness	From 1 to 5	You can set the brightness of the backlight of the LCD screen to a level from 1 to 5.
Touch Panel Settings	You can adjust the touch panel settings.	
Reset All Settings	You can reset all settings.	

---

## Language Settings

You can select one of the following language settings.

- English (English)
- Français (French)
- Deutsch (German)
- Italiano (Italian)
- Español (Spanish)

---

## Group Name Settings

You can edit the group name.

---

## System Update

Refer to “Updating the Firmware” (page 71).

---

## Device Details

You can check the firmware version and the MAC address of the unit.

# Updating the Firmware

## Updating the system application

By downloading the latest version of the system application, you can take advantage of the newest functions. The unit accesses the Sony server to update the system.

When a new update is available, you will be notified by a message that appears on the screen while the unit is on and connected to the Internet.

**Note**

Make sure you do not attempt any of the following operations while the update is in progress.

- Turn the unit off
- Disconnect the network cable
- Remove the unit from the remote control charger

**1** Place the unit on the remote control charger.

**2** Press HOME on the unit.  
The HOME screen appears.

**3** Tap “ Settings.”

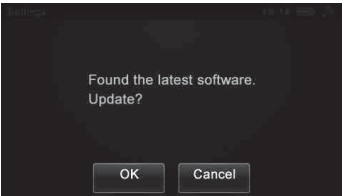
**4** Tap “System Update.”

One of the following messages appears on the screen.

“Found the latest software. Update?” : Proceed to step 5.

“The software is up to date. It does not need to be updated.” : A firmware update is not needed. Tap “Close” to exit this screen.

**5** Tap “OK.”



**6** Follow the on screen instructions.



The unit starts to update the system application. It may take a while (about 20 minutes at the longest) for the unit to finish the update. The required time will depend on the amount of data in the updates, the line type of the network, the network communication environment, etc.

When the system update finishes, the unit restarts automatically.

**Notes**

- Do not remove the unit from the remote control charger until the update has been completed.
- Reboot the unit once or twice after the update.

**To cancel the procedure**  
Select “Cancel” in step 5.

Additional information

# Troubleshooting

If a problem occurs while operating the unit, follow the steps described below before consulting your nearest Sony dealer. If an error message appears, it is recommended that you make a note of its contents for reference.

**1** Check to see if the problem is listed in this “Troubleshooting” section.

**2** Check the following customer support site.

- For customers in the USA:  
<http://www.esupport.sony.com/>
- For customers in Canada:  
English:  
<http://www.sony.ca/ElectronicsSupport/>  
French:  
<http://fr.sony.ca/ElectronicsSupport/>
- For customers in Europe:  
<http://support.sony-europe.com/>

You will find the latest support information and a FAQ at this web site.

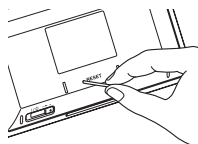
**3** If, after steps 1 and 2, you still cannot solve the problem, consult your nearest Sony dealer.

If the problem persists after doing all of the above, consult your nearest Sony dealer. When bringing the unit in for repairs, be sure to bring in the entire system (main unit, remote control charger, and AC power adaptor).

## How to reset the unit

It is usually unnecessary to reset this unit. However, on rare occasions, the unit enters an abnormal state and stops responding to buttons or on-screen operations. In this case, reset the unit by pressing RESET on the rear panel.

To reset the unit, press RESET using a long, thin object, such as a small pin, to reboot the system.



## Power

The unit does not turn on.

- ➔ Place the unit on the remote control charger after connecting the AC power adaptor to the charger and the power cord to a wall outlet firmly (page 18).
- ➔ If the measure above does not solve the problem, reset the unit. Refer “How to reset the unit” on this page.

The unit does not turn off.

- ➔ Reset the unit. Refer “How to reset the unit” on this page.

## Network connection

An error message appears.

- ➔ Check the nature of the error.

The unit cannot connect to the network.

- ➔ Move the unit and the wireless LAN router/access point closer to each other and perform the setup again.
- ➔ Check the settings of the router/wireless LAN router/access point and perform the setup again. For details on the settings of the devices, refer to the operating instructions of the devices.
- ➔ Wireless networks are influenced by electromagnetic radiation emitted by microwave ovens and other devices. Move the unit away from these devices.
- ➔ Make sure that the router/wireless LAN router/access point is turned on.

## Network / Playback content on your server

### The unit cannot connect to a network.

- ➔ If you have reset the unit or have performed a system recovery on your server, make the network settings again (page 23).

### The unit fails to operate a device.

- ➔ The server and renderer (network controlled player) cannot accept commands from this unit temporarily for some reason.
- ➔ Make sure that the server and renderer (network controlled player) is turned on.
- ➔ The server and renderer (network controlled player) may be unstable. Restart it.
- ➔ Confirm that the unit, the server and renderer (network controlled player) are connected to the router/wireless LAN router/access point correctly.
- ➔ Confirm that the server and renderer (network controlled player) has been correctly set (page 32).
- ➔ Confirm that the unit has been registered with the server and renderer (network controlled player) and is set to allow music streaming from the server.
- ➔ If the ICF (Internet Connection Firewall) function is active on the computer, this may prevent the unit from connecting to the computer (only when your computer is used as a server). You may need to change the firewall settings to allow the unit to connect. (For details on changing the firewall settings, refer to the operating manual of your computer).

### Content is played back from the beginning, even if you change the playback mode or playback range.

- ➔ The renderer (network controlled player) may not be able to change the playback position.

### The server (such as a computer) does not appear in the server list.

- ➔ You may have turned this unit on before you turned the server on. Display the server list first, then tap “Refresh” after tapping “Options” on the side menu to refresh the server list.
- ➔ Make sure that the router/wireless LAN router/access point is turned on.
- ➔ Make sure that the server is turned on.
- ➔ Confirm that the server has been set correctly (page 32).
- ➔ Confirm that the unit has been registered with the server and is set to allow music streaming from the server.

- ➔ Only the server which includes content of the selected Activity is displayed on the server list. In this case, servers other than the above server do not appear, even if the power switch is turned on.

### The sound or the video skips during playback.

- ➔ The bandwidth of your wireless LAN may be too low. Move the unit and the wireless LAN router/access point closer to each other, without any obstacles between them.
- ➔ When using your computer as a server, the computer may be running many applications. If anti-virus software is active on the computer, temporarily disable that software as it needs large amounts of system resources.
- ➔ Depending on the network environment or radio interference, it may not be possible to play content with more than one device operating at one time. Turn off any other devices to enable the unit to play content.

### The unit cannot access the server and renderer (network controlled player).

- ➔ Permit access from this unit to the server and renderer (network controlled player) settings.

### You cannot turn the server on using this unit.

- ➔ You can turn on a server which supports the WOL (Wake On LAN) function. Turn the server on manually when you are using a server which does not support the WOL function.

### “The power of the player device is not turned on. Turn the device on.” appears on the screen even if the server and renderer (network controlled player) are turned on.

- ➔ Make sure the server and renderer (network controlled player) are connected to your home network.

### The total number of content items is displayed as “--.”

- ➔ “--” is displayed when the total number of content items exceeds 999.

### The currently elapsed time, total time, and progress bar do not appear on the playback screen.

- ➔ Those items do not appear when the duration of content cannot be obtained.

---

You cannot move the playback position when you move the cursor shown on the progress bar.

---

- ➔ You may not be able to move the playback position, depending on the content or the renderer (network controlled player).
  - ➔ You cannot move the playback position if the cursor shown on the progress bar has not appeared.
  - ➔ You cannot move the playback position, even if there is a cursor shown on the progress bar, if the content currently being played back does not support the seek function.
- 

The total playback time of all content items is displayed as "--."

---

- ➔ "--" is displayed when the total playback time of all content items exceeds 999 minutes and 59 seconds.
- 

You cannot select the playback range or playback mode.

---

- ➔ Only the playback range or playback modes supported by the currently active renderer (network controlled player) are displayed.
- 

You cannot return to the content list even if you tap ◀.

---

- ➔ The server list appears when you tap ◀, depending on the content currently being played back.
- 

You cannot find a new renderer (network controlled player).

---

- ➔ You can only register up to 30 devices. Delete any unnecessary devices, then tap "⌂ Refresh" on the HOME screen.
  - ➔ Make sure of the following.
    - Does the renderer (network controlled player) have access limitations even though you have not registered 30 devices yet?
    - Is the renderer (network controlled player) connected to your network correctly?
    - Is the renderer (network controlled player) function of the device active?
- 

Content stored on the server is not displayed on the content list.

---

- ➔ Only content that can be played back may be displayed, depending on the Activity.
- 

---

The same device has been registered again after you have deleted it.

---

- ➔ Devices which have the DLNA renderer function will be registered with this unit automatically. Set the DLNA renderer function of the device to OFF when you do not want to display the device on the device list of this unit.
- 

You cannot begin the selected Activity once the power-off dialogue is displayed, even if the server and renderer (network controlled player) are set to ON.

---

- ➔ Make sure that the server and renderer (network controlled player) have not set access limitations.
- 

## PARTY

---

The PARTY currently being held is not displayed on the HOME screen.

---

- ➔ Tap "⌂ Refresh" to refresh the HOME screen.
  - ➔ Make sure the PARTY host has permitted access from this unit.
  - ➔ Make sure the unit has registered the PARTY host in advance.
- 

You cannot find devices having the PARTY STREAMING function.

---

- ➔ Check the following possible causes.
    - This unit is not registered with any devices having the PARTY STREAMING function.
    - Devices having the PARTY STREAMING function are not turned on.
- 

You cannot start a PARTY with the desired content.

---

- ➔ Start the PARTY after playing back the desired content using a device with the PARTY STREAMING function (page 38).
-

## Infrared Activity screen

You cannot operate devices.

- ➔ Move closer to the device. The maximum operating distance is approximately 10 m. (32.8 ft).
- ➔ Check that you are aiming the unit directly at the device, and that there are no obstructions between the unit and the device.
- ➔ Power on the devices first, if necessary.
- ➔ Check that the device has remote infrared capability. For example, if your device did not come with a remote commander, it probably is not capable of being controlled by a remote commander.

You cannot find the desired device using the Smart Select function.

- ➔ Check whether the desired device has the Smart Select function. Refer to “Using the Smart Select function” (page 52) for details of Smart Select function.
- ➔ Check whether the setting of the Smart Select function of desired device is set to ON.
- ➔ Check whether this unit is aimed at the device.
- ➔ Check whether there are obstructions between this unit and the device.
- ➔ Other devices may be found faster if the device with the Smart Select function is near the device you want to detect.

## iPod & iPhone

The audio content that is played back automatically after selecting the iPod & iPhone Activity is different from that played back the previous time.

- ➔ The first item in the shuffle list is played back when you select “Shuffle” or “Shuffle&Repeat.”
- ➔ If content has been added, edited, or deleted from your iPod & iPhone since the last time you used it for playback, different content may be played back.

An error message appears when you try to display the content list on the unit or iPod docking server.

- ➔ This error message may appear when you try to display the content list while the unit is downloading the jacket information. Wait for a moment until the unit finishes downloading the jacket information.

You cannot display some items when you select “iPod & iPhone” as an Activity. / You cannot perform some operations when you select “iPod & iPhone” as an Activity.

- ➔ Display items or operations you can perform are different depending on the status of your iPod or iPhone.

**The remote UI mode is set to OFF on the iPod docking device:**

The content name is displayed as “iPod.”

When you play back content from an iPod or iPhone mounted on the iPod docking device using another renderer (network controlled player):

- You can use ► and ■ button.

When you play back content from an iPod or iPhone mounted on the iPod docking device using that device:

- You can use ►, II, ◀◀ and ►► buttons.

**The remote UI mode is set to ON on the iPod docking device:**

Each content item name is displayed.

When you play back content from an iPod or iPhone mounted on the iPod docking device using another renderer (network controlled player):

- You can use the ►, ◀◀, ►► and ■ buttons.
- Some operation modes cannot be displayed.

When you play back content from an iPod or iPhone mounted on the iPod docking device using that device:

- You can use the ►, II, ◀◀ and ►► buttons.

# Precautions

## On safety

- Do not drop the unit or give a shock to the unit, or it may cause a malfunction.
- Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or sand, moisture, rain or mechanical shock.
- Do not put foreign objects into the unit. Should any liquid or solid object fall into the unit, have it checked by qualified personnel before operating the unit any further.
- Do not expose the remote control detectors of your components to direct sunlight or other strong illumination. Too much light there can interfere with remote control operations.
- Be sure to place the unit out of the reach of small children or pets. Components such as air-conditioners, heaters, electric appliances, and electric shutters or curtains receiving an infrared signal can be dangerous if misused.
- Completely disconnect the power cord (mains lead) from the wall socket (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.
- Should any solid object or liquid get into the unit, unplug the unit, and have it checked by qualified personnel before operating it again.
- The AC power adaptor can be changed only by a qualified service facility.

## On placement

- Do not place the unit in an inclined position or in locations that are extremely hot, cold, dusty, dirty, humid or lacking adequate ventilation, or subject to vibration, direct sunlight or a bright light.
- Be careful when placing the unit or speakers on surfaces that have been specially treated (for example, with wax, oil, polish) as staining or discoloration of the surface may result.

## About the AC power adaptor

- Use the AC power adaptor supplied with this unit. Do not use any other AC power adaptor since it may cause this unit to malfunction.



Polarity of the plug

- Connect the AC power adaptor or the power cord to an easily accessible AC outlet. Should you notice an abnormality in the AC power adaptor or the power cord, disconnect it from the AC outlet immediately.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- If you are not going to use this unit for a long time, be sure to disconnect the power supply. To remove the AC power cord from the wall outlet, grasp the adaptor plug itself; never pull the cord.

## On disposing of the remote control

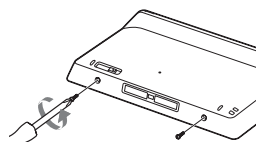
Before disposing of the remote control, the built-in battery should be removed for environmental protection.

### Notes

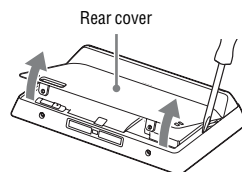
- Do not remove the screws at the bottom of the remote control except when disposing of the remote control.
- Before removing the built-in battery, make sure it has completely drained.

Use the following procedure to remove the built-in battery.

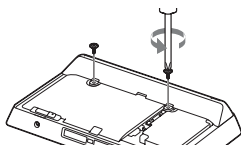
- 1 Remove the two screws on the bottom of the unit.



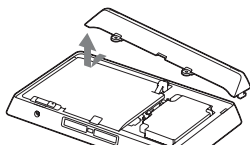
- 2 Open the rear cover using a flat object, such as a flathead screwdriver, then remove it.



- 3 Remove the two screws from the bottom cover.

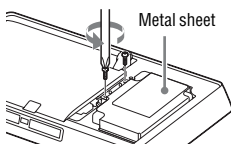


- 4 Remove the bottom cover by lifting it up from the right side as shown below.



- 5 Remove the two screws from the metal sheet.

The battery is stored under the metal sheet.

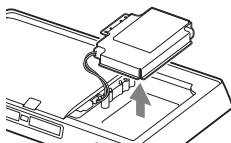


- 6 Remove the metal sheet and the built-in battery.

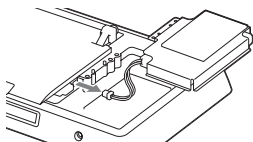
The battery is attached to the metal sheet by adhesive tape.

#### Note

Be careful not to injure yourself when handling the metal sheet.



- 7 Disconnect the cable that connects the battery to the unit.



## About this unit

- If you have connected to an outside network, such as the Internet, and have allowed access from other devices, unauthorized access by malicious outsiders can occur depending on your network configuration. It may cause damages such as data falsification. To avoid this problem, before using this unit, you need to:
  - Use a router and configure it correctly.
  - Register the equipment that is to access this unit.
- It is prohibited to send or leave copyrighted products to/on an out-of-home network which can be accessed from many people without the author's permission by the Copyright Act.
- About DLNA support: This unit is designed in accordance with DLNA Guideline v1.0. This unit is commercialized to gain formal DLNA accreditation. This product may be upgraded to maintain interconnectivity.

## Do not drop this unit

- Do not subject the unit to strong shocks. It may cause the unit to malfunction.
- Do not exert strong pressure on the front side of this unit where the speakers are mounted.

## Consideration for others

Keep the volume at a moderate level out of consideration for your neighbors, especially at night.

## Notice for touch panel operations on the unit

The touch panel of the remote control does not work properly when operated with:

- a gloved finger.
- two or more fingers.
- a finger nail.
- a wet finger.
- a pen, ballpoint pen, pencil, stylus, etc.
- objects other than a finger.

## About lit and unlit dots on the LCD

You may notice some dots (red, blue, or green) on the liquid crystal display that do not turn off or do not turn on (black dots). These dots do not represent a malfunction. Because of the high precision of the technology used in its manufacture, the LCD maintains an effective pixel count of 99.99% or more; however, there will be, on rare occasions, pixels that do not go on or that remain lit.

## Cleaning the cabinet

Clean this unit with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as thinner, benzene, or alcohol.

# Specifications

## Network Remote Controller (RMN-U1)

---

### Wireless LAN section

#### Compatible standards:

IEEE 802.11 b/g  
(WEP 64 bit, WEP 128 bit,  
WPA/WPA2-PSK (AES),  
WPA/WPA2-PSK (TKIP))

---

### General

#### Power requirements:

AC adaptor

Models for the USA and  
Canada

Input 100 V – 240 V AC, 50/60 Hz  
Output 5.2 V DC, 1.25 A

Models for Europe

Input 220 V – 240 V AC, 50/60 Hz  
Output 6 V DC, 1.4 A

#### Power consumption:

Models for the USA and  
Canada

6.5 W

Models for Europe

8.4 W

#### Operation time on a full charge:

Approx. 4 hours

#### Dimensions (w/h/d) (including projecting parts and controls):

The unit

161 mm × 95.2 mm × 19 mm  
(6 3/8 in. × 3 3/4 in. × 3/4 in.)

Remote control charger

170 mm × 43 mm × 71.5 mm  
(6 3/4 in. × 1 3/4 in. × 2 7/8 in.)

#### Mass:

The unit

Approx. 260 g (9.2 oz)

Remote control charger

Approx. 325 g (11.5 oz)

#### Operating temperature:

+5 °C to +35 °C  
(+41 °F to +95 °F)

#### Operating humidity:

25 % to 80 %

#### Supplied accessories:

See page 11.

Design and specifications are  
subject to change without  
notice.

# Glossary

## AAC

Abbreviation for Advanced Audio Coding. It is a standard for audio file compression determined by the MPEG (Motion Picture Experts Group), an ISO (International Organization for Standardization)/IEC (International Electrotechnical Commission) working group.

## DHCP

Abbreviation for Dynamic Host Configuration Protocol. A system for automatically allocating configuration data required for an Internet connection.

## DLNA

Abbreviation for Digital Living Network Alliance. The DLNA is a nonprofit organization that establishes design guidelines for digital content shared over networks. For details, see <http://www.dlna.org/en/consumer/home>

## DNS

Abbreviation for Domain Name System. A server that translates domain names to IP addresses, or IP addresses to domain names. A DNS is identified by an IP address. Also called a “DNS server.”

## IP address

IP addresses usually comprise four groups of up to three digits each, separated by a period (such as 192.168.239.1). All devices on a network must have an IP address.

## LAN

Abbreviation for Local Area Network. LAN is a general name for networks set up for communication among devices including computers, printers, and fax machines in relatively small areas such as offices or buildings.

## MAC address

Abbreviation for Media Access Control address. It is an identification name assigned to all network devices. Each device has its own address and there are no duplicate addresses. A MAC address may be necessary when identifying the unit separately from other devices (such as a DLNA server).

## Network key (security key)

An encryption key used to limit the devices with which communication can occur. It is used to provide higher security for devices communicating via a wireless LAN router/access point.

## Proxy

A program or a server that provides Internet access to computers within a firewall or quicker downloading of web pages.

## Router

A device that bridges networks, converting the protocols and addresses of each network. When connecting multiple network devices to the Internet, a router is necessary. The term “router” by itself may refer to any of these devices.

## SSID

Abbreviation for Service Set Identifier. It is a name that identifies a particular access point within an IEEE 802.11 wireless LAN. To connect with an access point, a client device must be set with the same SSID. SSIDs can be up to 32 characters long. For higher security, a network key is normally also used. In this case, connection cannot occur unless the SSID matches the network key.

## WEP

Abbreviation for Wired Equivalent Privacy. An encryption key used in wireless LAN networks. As an IEEE standard based on RC4 algorithm cryptography, WEP is used to secure IEEE 802.11b wireless networks. During the transmission of a message between a wireless LAN access point and a client device, the sending side encrypts the data and the receiving side decrypts it. For communication to occur, both devices must use a common code key, which is called the “WEP key.” The encryption level is indicated by the bit count of the key; e.g., 64 bits or 128 bits. The higher the bit count, the higher the security level.

## WMA

Abbreviation for Windows Media Audio. WMA is audio compression technology developed by Microsoft Corporation that allows audio files to be compressed to about 1/22 of the data size of a standard compact disc.

## WPA

Abbreviation for Wi-Fi Protected Access. An encryption standard for wireless LAN networks created by the Wi-Fi Alliance to remedy a number of serious security problems in the WEP system. In addition to the network name (SSID) and encryption key (WEP), this protocol uses a user authentication framework called “EAP” (Extensible Authentication Protocol) and a protocol called “TKIP” (Temporal Key Integrity Protocol) which automatically updates the encryption code at regular intervals for higher security.

## **WPA2**

Abbreviation for Wi-Fi Protected Access 2. An encryption standard for wireless LAN networks. As an upgraded version of WPA created by the Wi-Fi Alliance, this standard uses AES (Advanced Encryption Standard) cryptography to provide stronger security than WPA.

## **WPS**

Abbreviation for Wi-Fi Protected Setup. A wireless network standard created by the Wi-Fi Alliance to allow you to set up a wireless network easily. A push button method and a PIN code method are available.

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